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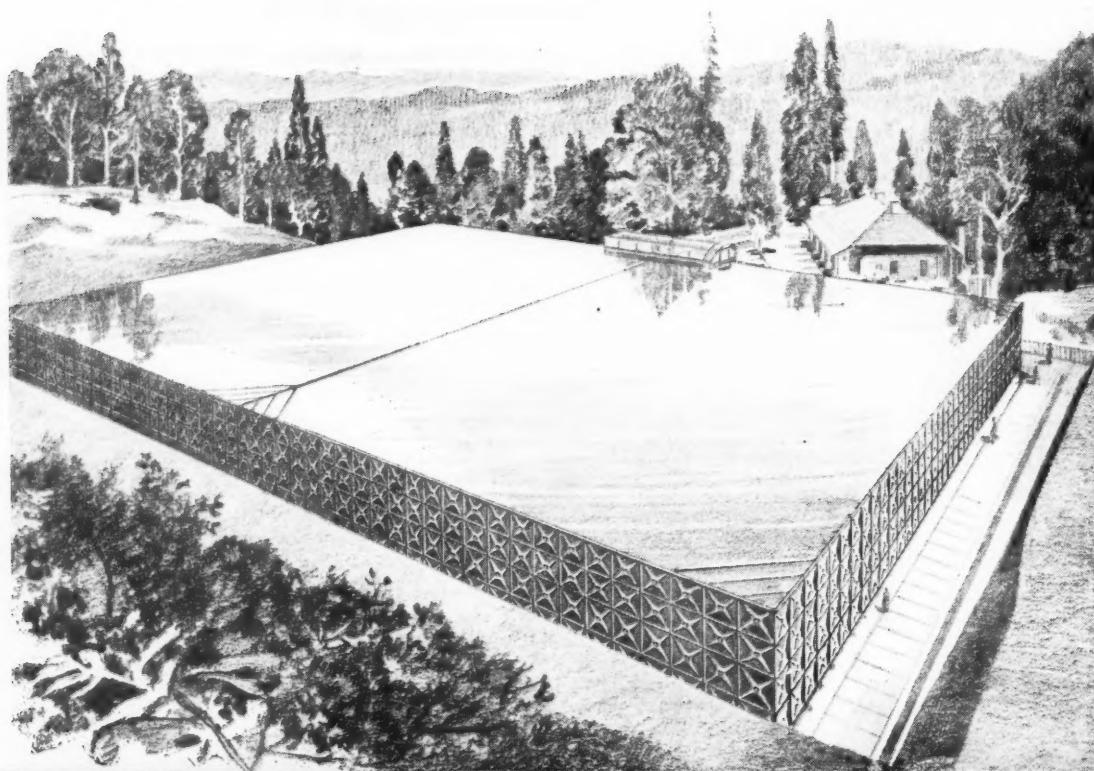
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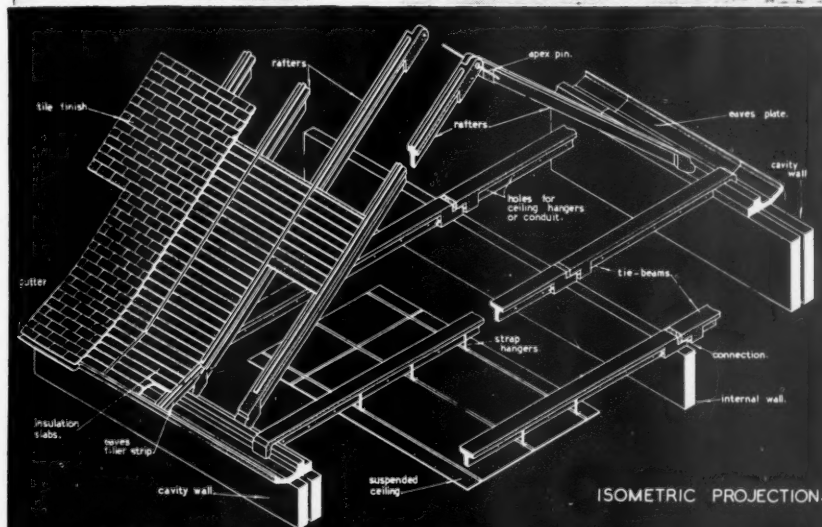
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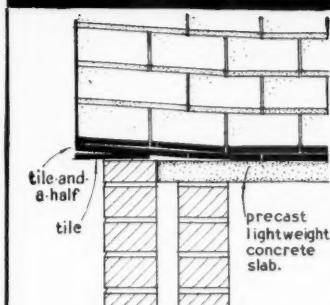
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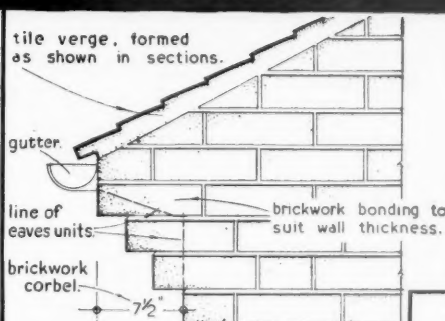
Works throughout the Country



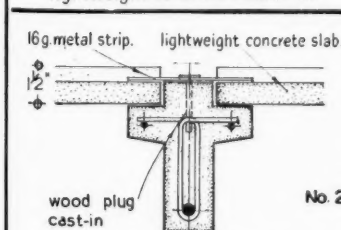
COTTAGES for AGRICULTURAL WORKERS. Pitched roof construction



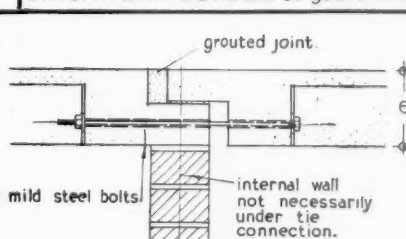
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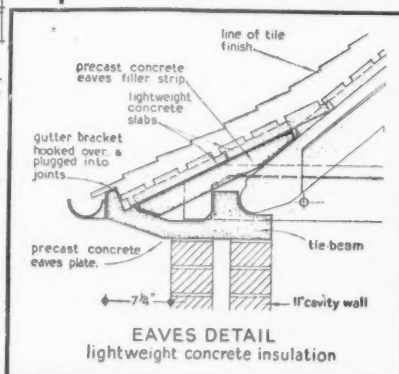
BRICKWORK CORBEL. at gable end.



RAFTER SECTION at 90° TO SLOPE
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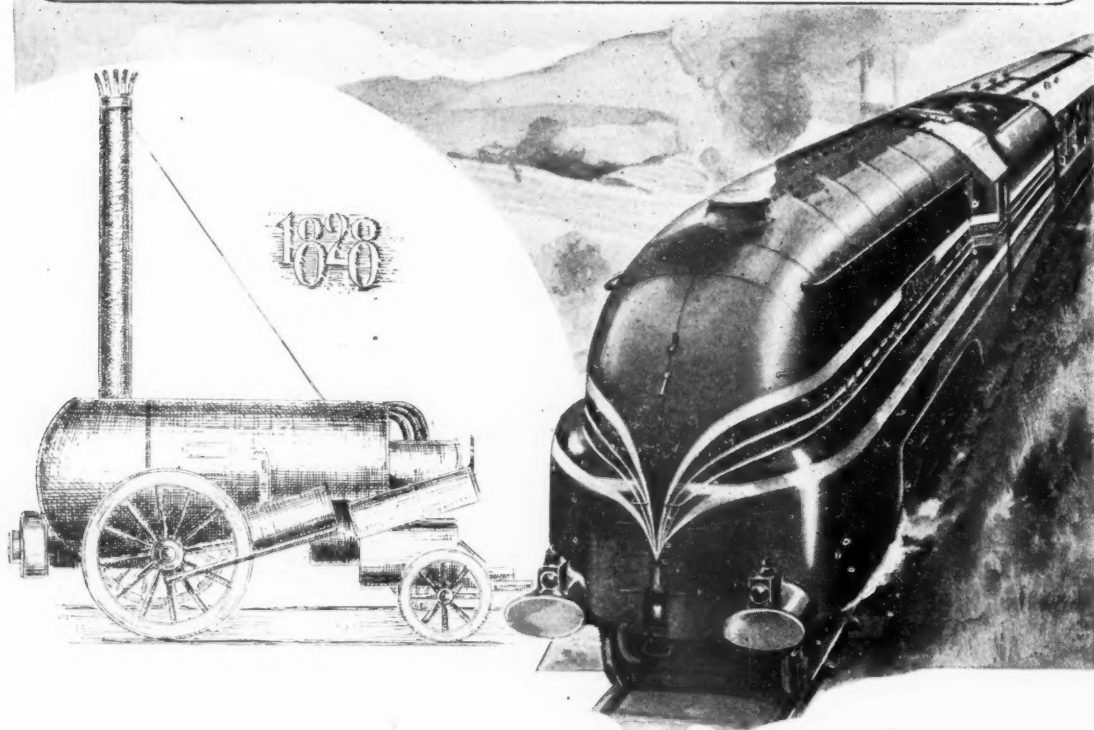


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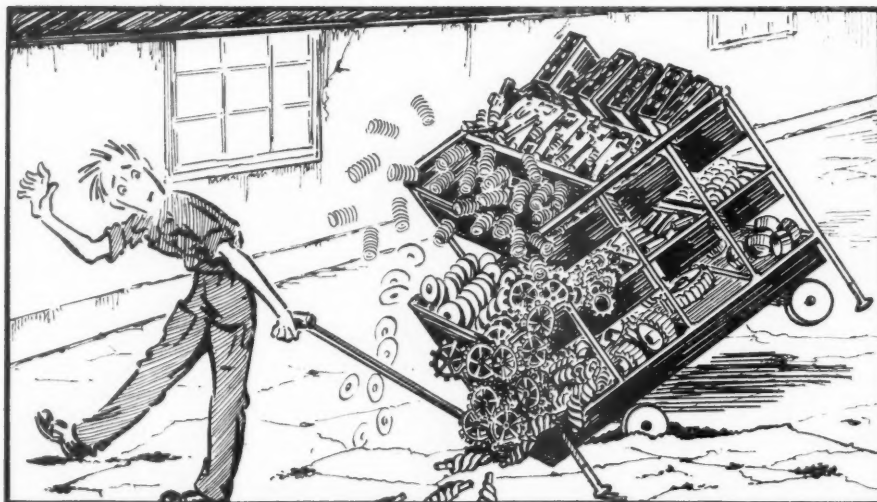
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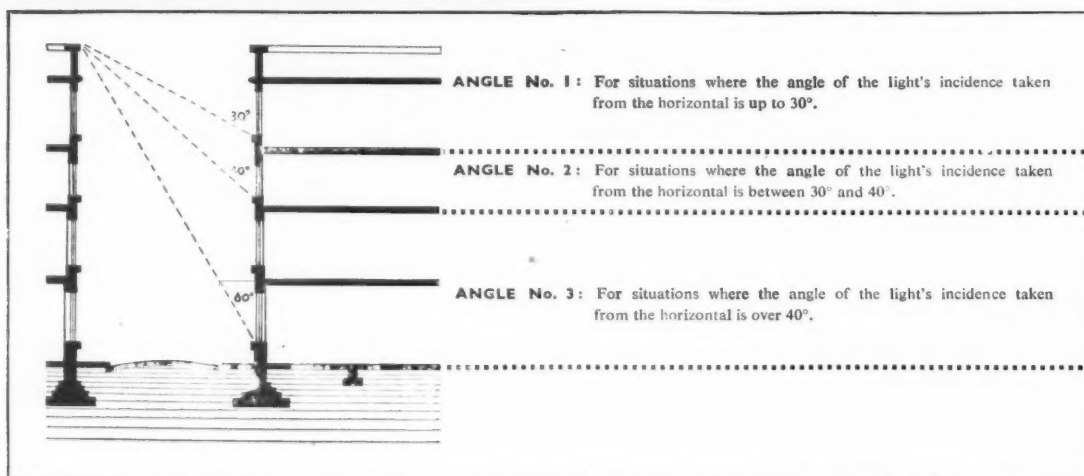
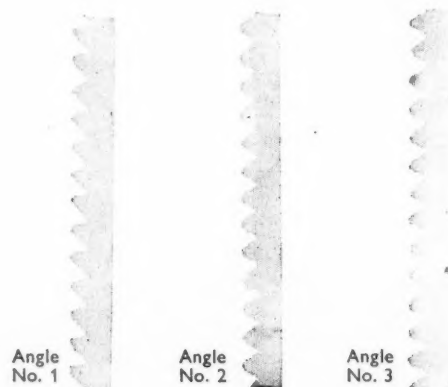
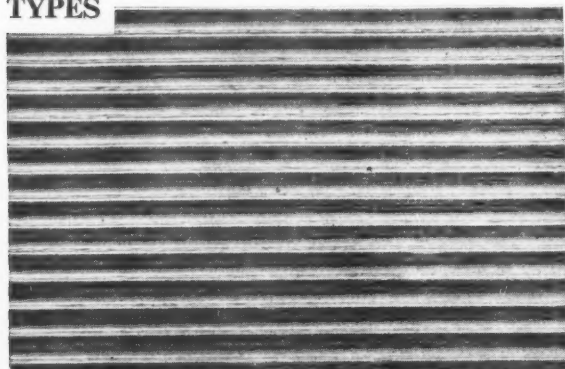
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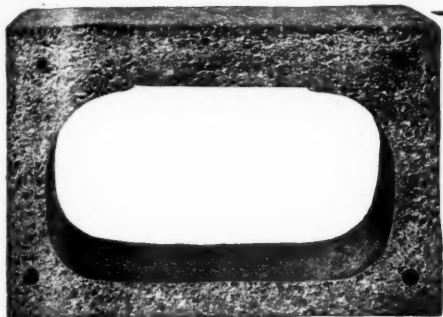
Glaze windows where the angle of the light's incidence taken from the horizontal is between 30° and 40° with PRISMATIC Angle No. 2.

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JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

3rd Series]

[Vol. 50

No. 8

JUNE, 1943

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Journal

THE BIRTHDAY HONOURS LIST

The following awards in the Birthday Honours List are of special interest to architects :—

MR. HUGH BEAVER, Director-General of the Ministry of Works, has been made a Knight Bachelor.

SIR GEOFFREY WHISKARD, Permanent Secretary to the Ministry of Town and Country Planning, has been awarded the K.C.B.

CAPT. A. B. WATERS, R.E. [A.], M.B.E. (Military division).

ARCHITECTURAL EDUCATION ON DEMOMILISATION

The following letter from Mr. Basil Sullivan [F.], Chairman of the R.I.B.A. Demobilisation Committee, has been sent to the technical Press :—

" FURTHER EDUCATION AND TRAINING SCHEME "

11.6.43.

SIR,—In the following paragraphs an endeavour has been made to give as shortly as may be, in view of the restrictions on space, the gist of the Government's " Further Education and Training Scheme." Those interested are advised to obtain copies of the leaflet containing fuller details from the Ministry of Labour and National Service, and those who wish to take advantage of the scheme or desire guidance should also consult the Head of the nearest Recognised School of Architecture, or, in areas where there is no Recognised School, should consult the Royal Institute of British Architects.

His Majesty's Government have approved plans for providing financial assistance to enable suitably qualified men and women on demobilisation to undertake or continue further education or training (*i.e.* beyond the secondary school standard). Those undertaking careers in the fine arts or the professions are included in the scheme.

The primary condition of eligibility will be proof of a period of full-time effective service in work of national importance

during the war. In addition, the candidate will ordinarily be required to show that by reason of his service he has been unable to start training ; has suffered interruption or diversion of a career ; is unable to resume or continue a career, or requires a refresher course to enable him to follow his previous profession.

By " further education " is meant " education beyond the secondary school standard." It may be divided into courses for those who entered war service before going to a University or entering on a course of training ; for those whose further education has been interrupted by war service ; or refresher courses mainly for older groups.

The criterion for entry to the courses will be whether a candidate is capable of profitably undertaking the course desired.

The award to a successful applicant will be in the form of a grant enabling him to take the full course of training which he may need, the amount varying according to his existing obligations, his financial resources, if any, and the length and nature of the courses approved. The needs of married candidates will receive special consideration.

In appropriate cases candidates will be permitted to take courses at Dominion or other overseas Universities.

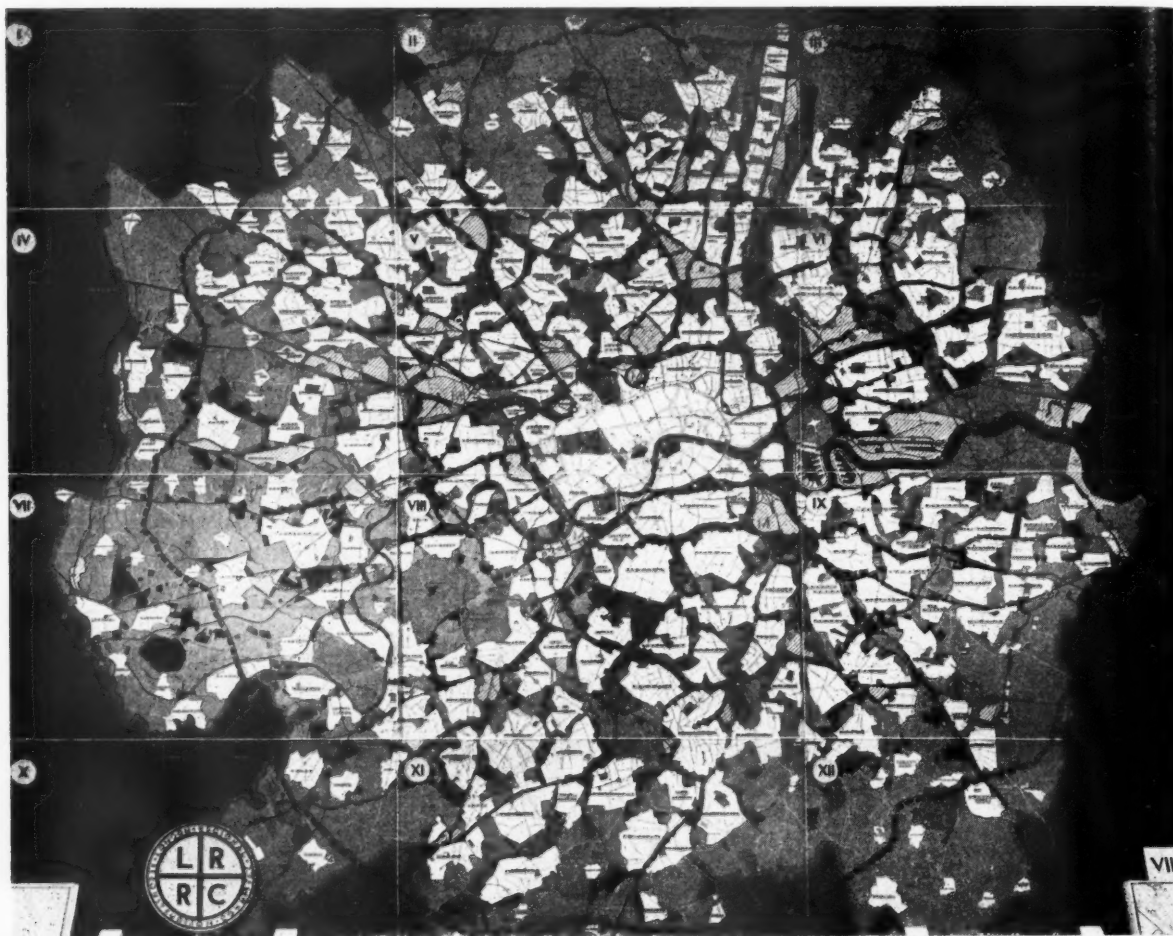
Continuance of an award will normally be conditional upon the passing of the ordinary examinations associated with the course.

The scheme cannot come into full operation until general demobilisation begins, but applications for consideration can be received immediately from men and women who have been discharged from their war service through disablement or on medical grounds, and who are not required by the Ministry of Labour to undertake other forms of national service. Those who have been discharged from their war service through disablement or on medical grounds should, if they desire to be considered for assistance under the scheme, apply in the first instance in writing, but not in person, to : *The Appointments Department, Ministry of Labour and National Service, Sardinia Street, London, W.C.2.*

Yours faithfully,

BASIL M. SULLIVAN,

Chairman, R.I.B.A. Demobilisation Committee.



THE BUILDING INDUSTRY IN POST-WAR— A B.I.N.C. CONFERENCE

The Building Industries National Council is holding a Building Congress at Central Hall, Westminster, on 21 and 22 July, to consider some of the main problems involved in the work of the industry and allied professions in the reconstruction period.

The seven sessions of the Conference will be as follows:

WEDNESDAY, 21 JULY

10 a.m. **The Post-War Building Programme.** Lord Portal (Minister of Works), Mr. J. W. Stephenson, J.P. (President, N.F.B.T.O.), Mr. Howard Robertson [F.].

2 p.m. **Post-War Housing.** Mr. Ernest Brown, M.P. (Minister of Health), Mr. D. Wood [F.], F.S.I. (late Housing Commissioner for the Midlands, 1919-1922), Mr. W. McKinnell (President of the Building Societies Association).

4 p.m. **Building Industry and Development Overseas.** Sir J. Walker-Smith, M.P.

THURSDAY, 22 JULY

10 a.m. **Town Planning and the Building Industry.** Mr. W. S. Morrison, K.C., M.P. (Minister of Town and Country Planning), Mr. Geoffrey Hutchinson, K.C., M.P., Mr. A. C. Bosson, [F.] M.P.

11.20 a.m. and 2 p.m. **Availability of Labour in Building.** The Future Organisation of the Building Industries. Mr. George Hicks, M.P. (Parliamentary Secretary to the Minister of Works), Sir William Larke, K.B.E. (Vice-President National Council of Building Material Producers), Mr. A. Kirkwood Dodds (President of the Reinforced Concrete Association).

3.35 p.m. **Place of Building in Economic Reconstruction.** The Right Hon. Sir William Jowitt, K.C., M.P. (Minister without Portfolio), Major V. Lefebure, Mr. G. L. Gibson.

THE GREAT MAP OF LONDON, displaying the L.R.R.C. planning proposals. This shows clearly the separation of the borough on local residential and industrial units by a succession of open spaces formed by linking existing parks and gardens with new green spaces created out of existing built-up areas. The main trunk roads thread the green areas.

Mr. Richard Coppock, Chairman L.C.C. and late President of B.I.N.C., will receive the delegates at the opening of the first session on 21 July, and the Mayor of Westminster at the first session on 22 July. The Chairman of the sessions will include Mr. Ansell, Mr. L. Wallis, President B.I.N.C., Mr. J. M. Theobald, Past-President C.S.I., Lord McGowan, Chairman I.C.I., and Sir Malcolm Stewart.

The delegate's fee will be £1 1s., which includes luncheon on both days. The R.I.B.A. is sending 10 official delegates but individual members also will be welcome.

APPOINTMENTS

Mr. R. COPPOCK, C.B.E. [Hon.A.], has been elected the Right Hon. the Chairman of the London County Council for the remainder of the year 1943-44, to fill the vacancy caused by the death of Sir Alfred Baker.

Mr. A. F. B. Anderson [F], S.A.D.G., has been elected President of the Architectural Association for the year 1943-44.

MR. ANTHONY CHITTY

Mr. Anthony M. Chitty [F.] has been appointed Senior Architect, Post War Building, in the Ministry of Works.

GREATER LONDON: TOWARDS A MASTER PLAN

THE LONDON REGIONAL RECONSTRUCTION COMMITTEE'S EXHIBITION AT THE NATIONAL GALLERY

The Committee

The Membership of the Committee was as follows :

Henry V. Ashley [F.] (*Hon. Treasurer*), Robert Atkinson, Henry Braddock [A.], J. Murray Easton [F.], W. Curtis Green [F.], Stanley Hamp [F.] (*Deputy Chairman*), Frederick R. Hiorns [F.], Charles Holden [F.], Arthur W. Kenyon [F.] (*Chairman*), H. V. Lanchester [F.], S. Rowland Pierce [F.] and Verner O. Rees [F.] (*Joint Hon. Secretaries*).

Terms of Reference

"To consider and formulate the policy of the R.I.B.A. and its Allied Societies on the subject of post-war reconstruction and planning in its widest aspect.

"To work in co-operation with the Regional Committees appointed jointly by the Allied Societies and in co-operation with the Reconstruction Committee of the R.I.B.A.

"To cover the London Region on the same lines as the other Regional Committees set up jointly by the Allied Societies.

"To report to the Council of the R.I.B.A. through the Reconstruction Committee."

The Committee was appointed by the Council, R.I.B.A., with the above terms of reference after nominations made by the Council of the Royal Institute of British Architects and the Council of the Architectural Association.

The Region

The area for consideration is that of the Civil Defence Region No. 5. This area, by the very nature of the arbitrary boundary by which it is limited, can scarcely be accepted as a definite basis for planning. Its boundary is but a dotted line on a map ; an artificial line which, in the later stages of discussion, has been regarded by the L.R.R.C. as an elastic boundary which inevitably must be fixed finally by the planning of the area and not be a line controlling its planning.

The area of the Region is about 850 square miles. The estimated pre-war population of the Region is 8,500,000.

A SYNOPSIS OF THE REPORT

The synopsis of the Report which follows consists entirely of direct quotations, but it represents only a small fraction of the Report and for the most part consists of the statements of conclusions and facts drawn from their context in the reasoned **full Report which must be studied in detail if the opinions and plans reproduced here are to be understood.**

The Report is published as an octavo pamphlet of 52 pages, including 12 diagrammatic plans. It can be purchased at the Exhibition or from the R.I.B.A., price two shillings (2s. 3d. including postage).

Some General Assumptions

1. The L.R.R.C. are in agreement with the recommendations of the R.I.B.A. Reconstruction Committee's *Interim Report No. 1 (Planning and Amenities)*. The L.R.R.C. endorse the general policies of the Uthwatt and Scott Reports. The L.R.R.C. hope that these reports, together with that of Sir William Beveridge on Social Insurance and Allied Services, may form a basis for discussion and contribute towards the ultimate solution of many major problems of post-war reconstruction.

Communications of the Region

The following are the principal factors which have influenced the Regional Plan so far as it is concerned with transport :

The railways and arterial roads have been considered to be a part of and linked up with a National system for long-distance use by efficient modern vehicles at reasonable, not limited, speeds.

Railways, arterial roads, canals, rivers and the larger permanent open spaces, such as Epping Forest, have been held to be limiting factors for areas of local planning. Railways and main roads are destructive of amenities and endanger life and must, therefore, be especially regarded as fundamental barriers between urban areas.

Access to arterial roads has been restricted to a minimum number of planned convenient points by means of fly-over roundabouts and other types of junctions eliminating interruptions of fast traffic.

Inter-communication between railways, roads, canals, docks and aerial transport has received full consideration at all stages of the Plan.

National Transport and its Relation to the Region

The L.R.R.C. have assumed the establishment of a central or national authority for National Planning. Such an authority would be concerned, very properly, with a plan for the national network of railways, trunk roads, etc.

In the absence of a national plan the L.R.R.C. have, perforce, to make certain assumptions as to extra-regional communications.

The L.R.R.C. have assumed that the trunk railway system will be maintained on much the same framework as at present. The trunk roads should be planned nationally and be of such widths, sub-divisions, and gradients as can be used effectively by modern vehicles, with ample provision for future expansion.

Transport and other Factors Limiting Local Planning

In the broad layout of the Region the L.R.R.C. have considered that certain elements form **BARRIERS** for local planning. It is between these barriers, not across them, that planning should take place.

Some of these barriers are destructive of amenity. Railways and roads being high-speed ways are, in addition, dangerous to life and limb. The following are types of barrier found in the Region : *Railways . . . , Arterial Roads . . . , Canals . . . , Rivers . . .*

Large permanent open spaces are barriers of different character ; they become complete amenities for the use of the community, are natural limitations to urban sprawl, must be safeguarded against the encroachment of buildings and must be retained for use as planning features.

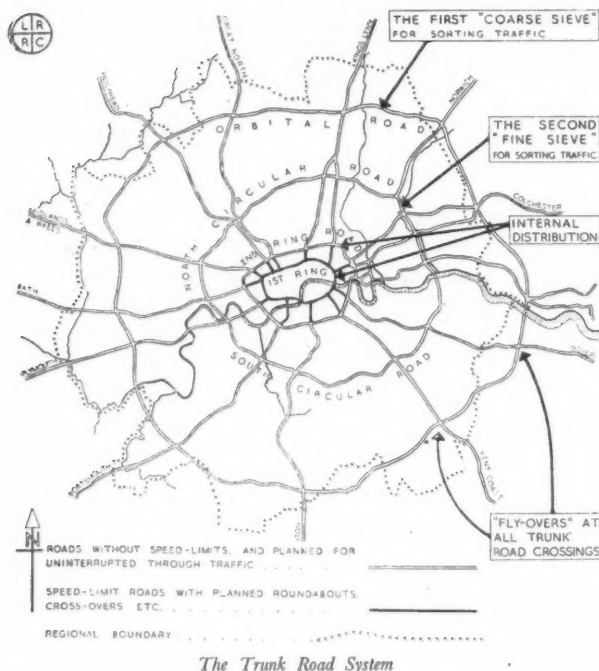
Trunk roads and railways have been planned to pass through continuous open spaces. The parkways and other open spaces should be effective in firmly establishing (a) the essential barrier nature of these communications, (b) a reduction of accidents, and (c) protection of amenity for the adjoining living or other types of area.

Main trunk roads should run through and share parkways or green belts in common with railways and canals.

Access to Arterial Roads

In the design of main trunk roads for use by fast traffic, it is essential that the number and places of access to such roads should be strictly controlled and located in positions pre-determined by the local planning of the areas.

The planned road connections are visualised as taking the form of various types of fly-overs and roundabouts. Throughout the Regional Plan, the type shown is the "fly-over roundabout." This is used rather as a symbol than as a rigid method to be adopted for all cases ; though it is considered, in common with transport authorities, that this type can be designed to fit most exigencies in close proximity to built-up areas and where land-space is limited. In more open country the well-known "clover-leaf" method of junction might be found to be desirable and even more suitable.



The Trunk Road System

Transport Inter-Communication

The L.R.R.C. have attempted to foresee and plan essential links between all forms of transport. The following points indicate some of the chief conclusions arrived at:

- (A) RAILWAYS:
 - (a) Redistribution of main-line and suburban passenger and goods traffic.
 - (b) Links with new sea-port and air-port and new industrial areas.
- (B) ROADS: Connection of trunk roads with proposed industrial and distribution areas.
- (C) CANALS: Linking of railways and sea-port with inland canal communications and the latter with the industrial areas.
- (D) RIVERS: Re-organisation of the Port of London area and its links with air, rail and road transport.
- (E) AIR:
 - (a) Proposed inner-London Air-port related to rail, road, river and canal communications.
 - (b) Establishment of one or two external air-ports for heavy long-distance air-traffic, with the necessary high-speed road and rail connections to the central area for both passengers and freight. The location of these major air-ports may be outside the boundary of the Region as the latter is determined by the L.R.R.C.'s terms of reference.

The Railways of the Region

Railways are as important to the life of the community as trunk roads; the railways, by method of construction and age, are more "immovable"; the destruction of common amenities is probably greater by railways than by main roads.

The problems have been classified under three headings; main-line services, outer-suburban services, and inner-suburban services.

(A) MAIN-LINE SERVICES

The terminal stations of London can be reorganised and reduced in number. The Regional Plan, therefore, shows the following:

- (i) A Western Terminus (Paddington) serving Western and South-western England, Wales, and the Irish services.
- (ii) A Northern Terminus (combining Euston, St. Pancras and King's Cross, in a double-level station) serving the Midlands, North-western and North-eastern England, Scotland and the Irish Services.

- (iii) An Eastern Terminus (Liverpool Street), serving Eastern England, and the East Coast ports.
- (iv) A Southern Terminus (combining many existing terminal or through stations of the centre, the chief of which are Waterloo, Victoria, Charing Cross, Cannon Street and London Bridge) serving South-eastern, Southern and South-western England and the Channel Ports.

The Western, Northern and Eastern Stations, as defined above, are shown as "through-terminal" stations on uni-directional looped-line plans.

The Southern Station is also shown as a "through-terminal" station.

The Northern Station loop-system is designed around a Central Market Area.

In addition, a circular main railway route is shown: it would use existing tracks with the exception of a new link line on the east side of London. This is primarily to facilitate the distribution of bulk freight.

(B) OUTER-SUBURBAN SERVICES

These are concerned with all areas lying between circles distant 12 to 15 miles and 30 miles respectively from the centre of London.

The railways under this heading are mainly used for the transport of passengers to and from the centre or near-centre of London. All the outer-suburban services should be electrified.

(C) INNER-SUBURBAN SERVICES

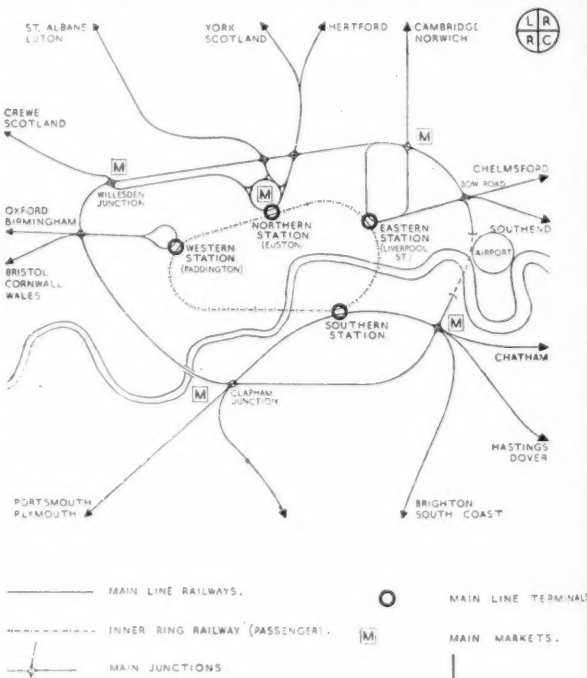
These services would provide internal railway communication for the whole of the area within the circle of 12 to 15 miles radius.

Aerial Transport

In the consideration of this problem the L.R.R.C. have had to make many assumptions, which have been based not upon any comprehensive official policy, as this has, so far, not been forthcoming.

The basic assumption is that a considerable expansion is inevitable and that development within even a limited period of twenty years is extremely difficult to foresee.

Three major premises have influenced the proposals: (a) with continued development of the rotor-plane (autogiro, etc.) some provision



Main line Railway access to transit of London

will be required for landing accommodation within certain controlled ground and/or roof areas for this type of machine; the L.R.R.C. feel, however, that this matter is one which is, at present, too hypothetical for definite planning and have, therefore, not allocated any precise landing places; (b) the possibility of dual air-services using marine and land air-ports is a problem which the L.R.R.C. feel is controversial and national and upon which they do not wish, therefore, to make definite recommendations, especially as it is evident that no major air-port using water as a landing medium can be planned within the Region; (c) the shorter the distance to be travelled by air, the closer and more comprehensive must be the ground communications to and from air-ports to the centre of the Region.

The L.R.R.C. have proposed an Inner Air-port to serve the London Centre, which by rail and road connections is linked with all parts of the Region. The suggested location is immediately to the north of the Isle of Dogs. It has been affected by enemy action and from most points of view is an area ripe for complete re-planning.

The L.R.R.C. have from time to time examined various proposals for elevated air-landing places within the central area. They are advised that, except possibly for the smaller areas already mentioned which may be required for rotor-type craft, such propositions are impracticable as landing places for future air-traffic.

The planning of aerial transport in the Region is essentially related to National Planning and International Traffic. It is, therefore, quite possible that London's express traffic along major world-air-lines will ultimately be served by air-ports at considerable distances from the city centre, instead of, or in addition to, the sites already mentioned.

THE RECONSTITUTION OF URBAN AREAS

1. Introduction

The following are the principal factors influencing the proposals as shown on the Regional Plan, for areas of living, working and recreation:

The areas of land created by the basic network-barriers of trunk communications and open spaces have been planned to provide for re-centralised urban areas.

Such urban areas would be self-contained communities, each with its own local civic sense and pride, each provided with its own amenities in the form of schools, clinics, hospitals, recreational, shopping and administrative centres, and each having planned provision for local light and domestic industries and for district-distribution. Definite limitation of size (area and population) of these entities has been regarded as a fundamental planning factor and is held to provide social amenity of the greatest importance for the future life of Greater London.

Scientific analysis of these land areas indicates that much greater public open space can be provided around the built-up areas and to form parkways in which main roads and railways can be segregated; while this policy may result in increased densities (people per acre) over localised net areas, the gross result averaged over large areas shows that densities need not be increased, although open space amenities can be nearly doubled.

Where buildings already exist upon land regarded as desirable for parkways and open spaces for amenity, such buildings would be scheduled for elimination as and when possible by reason of age or change of use.

In many parts of the Region land has been scheduled as being unsuitable for further building development; the open land thus reclaimed for amenity has been used for the parkways, etc., already referred to. Other green "barriers" surrounding urban areas will contain recreational facilities, market gardens, allotments, etc., and will provide sites for special types of schools, hospitals, etc.

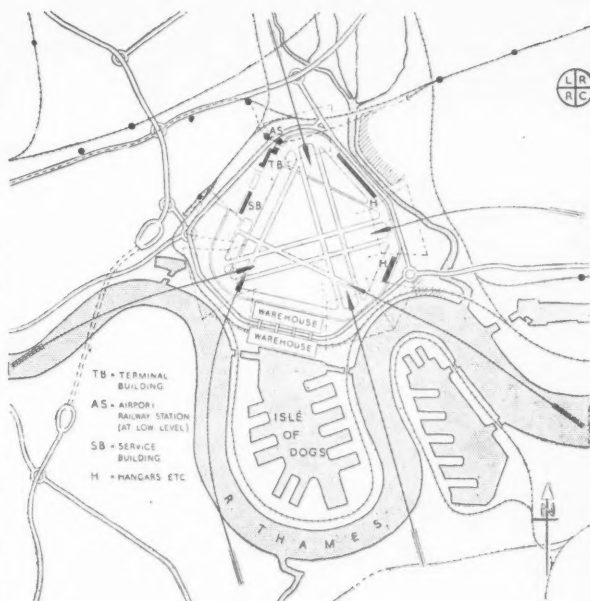
The limitation and re-creation of urban localities is desirable not only from a basic layout of communications, but as an essential factor in conscious civic life.

Local Services and the Limitation of Reconstituted Urban Areas

The efficiency of an urban district and, to a large degree, the measure of its civic pride is mainly to be found in the self-sufficiency and completeness of its local services and amenities.

Each of the urban areas as proposed to be reconstituted on the Regional Plan, must be provided with an adequate number of educational, clinical and recreational centres. Each of these services must be placed in the correct position within each area. The following are the principal local services considered:

Clinical facilities, recreational facilities, local administrative centres, theatres, meeting halls, churches and other communal buildings, light industries and those essential for public service, for example, bakeries, milk depots and laundries.



The Inner Airport

Large areas of equally spaced, identical, small houses or large areas of flats or tenements for the lower grade of income are strongly contributory to the potential formation of slums. Within any given living area all types of person should be able to find accommodation suited to his or her needs.

Under a proper planning policy a mixture of types of housing accommodation within each area can provide compensations for higher densities than exist in some districts at present, especially in the central areas of the Region, by virtue of the fact that higher buildings can be judiciously introduced in planned positions; this policy implies increased local open space, makes for healthier conditions, eases the problem of the undue spread of supply and other services with consequent all-round gain to the community. Density figures can have a wide range of possible adjustment and can be adapted, under a planned scheme, to local requirements.

Open Space and Amenity

From examination of many built-up areas the L.R.R.C. have concluded that much land is wasted and is unproductive for any type of amenity. Streets are often too numerous and many might be closed with distinct advantage to local planning.

That much greater open space should be provided in or around defined urban areas and that it can be so provided in a comprehensive plan, without substantial increase in density, is well shown. . . . It will be seen also that even with greatly increased open space, living area densities are not increased beyond reasonable averages or beyond the point where amenity is destroyed.

It is considered that open spaces radiating from the centre to the perimeter are essential to form tracks to and from the heart of the metropolis. Furthermore, these tracks or parkways would afford facilities for walking within easy access of the built-up areas.

Future open spaces must be acquired by a long-term policy of progressive scheduling of buildings.

The Regional Plan provides much additional space, land now unbuilt upon, within the planned areas of the urban units as future compensation for the gradual acquiring of lands which are now built-up but which should be ultimately cleared for the open space to be provided as a part of a co-ordinated plan.

The Use of Open Space

The gradual establishment of new and extended open spaces within the Region implies not mere waste lands or continuous

gardens or parks with high-upkeep costs; the L.R.R.C. emphasise the need for more space for allotments, market gardens and, in the outer green spaces of the Region, for dairy and arable farms. The extended open spaces of the Regional Plan would meet not only the recreational requirements of adjacent communities, but would provide amenity-sites of the highest value for various types of community buildings allied to the life of the urban areas: hospitals, convalescent homes, sanatoria, schools, sports centres, hostels for walkers and others and for many other similar buildings.

Industry and Supply Services

Areas for heavy industry have been segregated from living areas and have been planned on land circumscribed by and having access to, trunk communications.

The L.R.R.C. stress two highly important considerations which are corollaries of the main principle; (a) that industrial development must be located near or between the important lines of trunk communication; (b) that it is essential in the planning of these industrial areas, that they should be near, but not part of, living areas.

There are numbers of gas-plants, electricity stations and the like which are unfortunately placed in relation to existing or future replanned living areas. In a long-term policy for the regrouping of industry, such uncommunal elements must be moved to more suitable locations.

A further public supply service possible of realisation, is district heating and district hot-water services.

Markets

Certain principles emerge from a broad survey: (a) the markets should, in a long-term policy, be removed from the congested centre of London; (b) the number of fully-equipped markets should be increased; (c) the new markets should be placed in more efficient relationship with trunk communications, railways, roads and waterways; and (d) adjacent to the re-planned industrial areas.

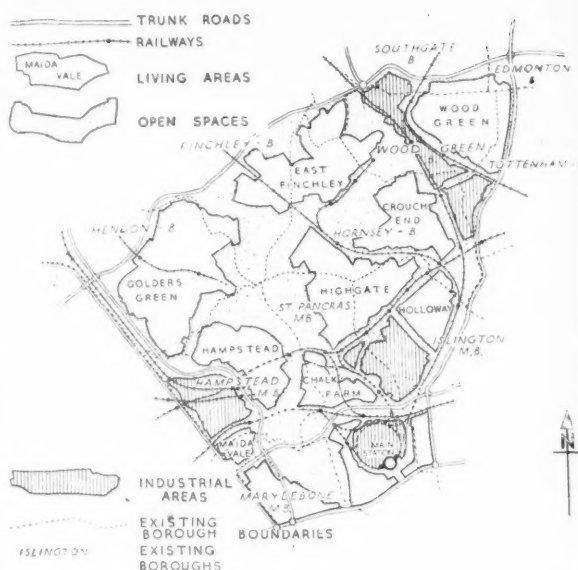
The interim proposals of the L.R.R.C. are, therefore, (i) the Region should be served by five recentralised commodity markets; one for the central area adjacent to the Northern Terminal Station and four others to serve respectively the North-western, North-eastern, South-western and South-eastern sectors of the Region; (ii) the locations of these new markets would be determined, in part, by the line of the ring-railway for freight, etc., and by easy access to the trunk roads and, where possible, to the canals of the Region; (iii) the new markets should be equipped with all proper facilities for the handling of all types of goods; (iv) the land areas required for these proposals would be considerable and the choice of sites would be made with due regard to the positions of the replanned industrial areas of the Region; (v) certain warehouses now associated with the Port of London, such as those for bonded goods, should it be considered, remain directly related to the docks; (vi) recentralisation of markets implies some central administrative headquarters situated in the centre of London: this could be planned as a part of, or near to, the Northern Station Market, or in a more central position, according to the policy finally adopted.

New Dock Facilities

The partial discontinued use of some older docks of the Port of London has thrown into relief the inadequacy and out-of-date nature of these port facilities.

The docks proposed to be closed are the following: St. Katherine's Dock (opened in 1828); London Docks (1805); Surrey Commercial Docks (1830, with many additions); West India Docks (1802); East India Docks (1806) and Millwall Docks (1868).

The new proposals are aimed at providing modernised dock service for the Port of London, and to ensure that heavy sea-going traffic shall not proceed further up the Thames than the Isle of Dogs.



A typical area replanned.

Historical Features and Natural Character of the Region

The preservation of all existing natural features, historic buildings and other places of intrinsic merit together with the continuity of traditional character, has been regarded as an essential of regional planning.

The Regional Plan and the Future

The following is an outline of some of the principal subjects of research which the L.R.R.C. hope to undertake and for which it is hoped the necessary backing and encouragement will be forthcoming.

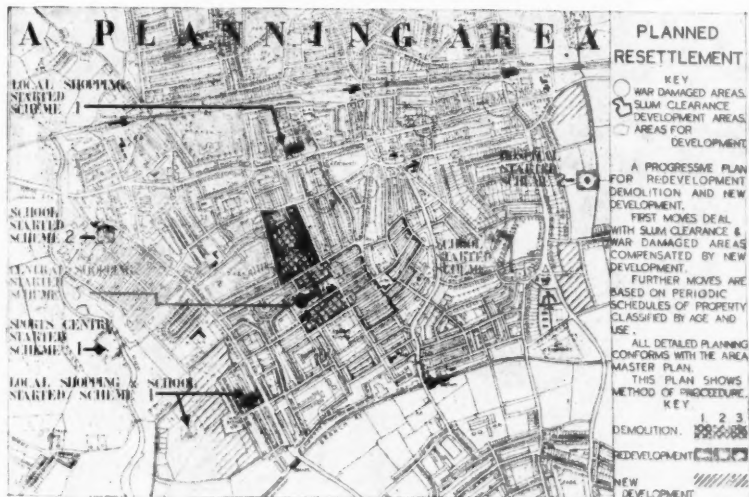
FUTURE WORK AND RESEARCH

- (a) Short-term programme for immediate, post-war building, based on the Regional Master Plan.
- (b) Development of work on trunk communications of the Region: particularly of railway co-ordination and details of both passenger and freight requirements.
- (c) Detail study of distribution of bulk commodities and the location and type of district and central market facilities.
- (d) Examination of typical Local Planning Areas for the purpose of "test-planning" for the determination of procedure for future detail planning.
- (e) Fuller liaison with adjoining Regions as the work of the Regional Committees, etc., develops. Adjustment of the Greater London Regional proposals to fit those both of the adjoining Regions and that of a National Plan as the latter is formulated.
- (f) Examination of Public Utility Services in relation to industrial and living areas.
- (g) More intensive work on problems of urban densities and their relationship to the provision of living accommodation.
- (h) Examination of the problems of site and height zoning for streets and buildings, particularly in the centre of the Region.
- (i) Co-operation with all those whose work is related to the aims of the L.R.R.C. whether concerned with social welfare, physical planning, financial or legal provisions for the implementation of planning and progress.

In Conclusion

It would seem there are two broad alternatives before the people of the Region and indeed, of Great Britain; firstly, to muddle along and let things take a chance until some future generation finds the resulting chaos quite intolerable and, at vastly increased expense, decides to end it; secondly, to start planning now.

The L.R.R.C. freely and independently have chosen the latter alternative; they have attempted, within the limits that have been imposed by money, by



A PLANNING AREA

A typical London area analysed and replanned

Three from a series of six

screens

SURVEY AND ZONING

Land.—All land within the area examined in the light of present and future use relative to the regional master plan.

Allotment of public open space reviewed and adjusted within the area.

Space allotted for social and public service buildings, etc.

Final average population density agreed.

Existing built-up sites beyond boundaries are classified as to age and use to prepare for reclamation of space with reservations for special buildings and trunk communications.

Buildings.—Pre-war records of slum clearance and unfit houses reviewed.

War Civil Defence records of damaged and destroyed buildings reviewed.

All other buildings classified as to age and use to prepare for future rebuilding under the master plan and for local requirements.

Buildings of national or local interest scheduled for preservation.

Temporary reconditioning of existing buildings considered and related to progressive rebuilding.

Warning.—Permanent reconditioning of the unsuitable prolongs bad living conditions and must be avoided.

Population.—Density per acre zoned and related to requirements over the whole area subject to the regional master plan.

Types of housing for individual and family needs are ascertained: Hostels, flats, maisonettes, houses for families of various sizes and for old people.

Number and size of necessary public service buildings ascertained: Schools and clinics, shops, local industries, libraries and churches, entertainments, sports, etc.

SOCIAL SERVICES

Education.—Schools sited for use up to $\frac{1}{4}$ mile radius:

Children		Schools	
3-5 years	1,800	Infants, Junior &	
5-14 years	9,000	Senior	12
14 years and over	400	Secondary-Technical	1
Existing Sites		Existing	2
		Enlarged	1
		Modernised and Enlarged	2
New Sites			8

Churches.—One existing church scheduled as building of historic interest; three existing churches; one new church sited; two existing cemetery chapels.

Medical.—Five clinics at sub-shopping areas; five doctors to each clinic; one 100-bed hospital.

Central Shopping and Administrative Area.—Sited for use up to $\frac{1}{4}$ mile radius, including: Administration building; public service building; N.F.S. and police buildings; secondary and technical schools; community centres; central library, theatre, etc.

Sub-Shopping Areas 5.—Sited for use up to $\frac{1}{4}$ mile radius, including: Clinics; branch libraries; cinemas, etc.

Sport.—Central sports and recreation area planned for: Football, hockey, cricket, tennis, bowls, etc.; open-air swimming baths and boating area; sports arena with public stand for inter-area matches and athletic meetings; facilities for sports clubs, etc., included in detail area planning.

Public Open Spaces, Parks, Gardens and Playgrounds.—Redistributed to include and protect buildings of interest and for the use of young and old people.

labour, by lack of co-ordinated scientific information, to draft the outlines of a Regional Plan. It is realised that this Plan cannot be final and is incomplete in many ways; in this Report the principles that have guided the L.R.R.C. in the presentation of interim suggestions have been given in generalised terms. It has not been thought necessary to include records of many discussions, interviews, conferences that have contributed to the draft as it now stands; nor have the many preliminary drawings and analytical diagrams of the early stages of work been included in the documents that are placed before the public on the walls of the National Gallery. This work, this long preparatory process, must be accepted and taken as the background of many decisions and recommendations.

The L.R.R.C. realise that many interests will oppose the ideas of the Regional Plan and its implications for wider planning, national and international. These will be vested interests or those that may be termed political or belong to the lazy-minded and those who would return to the muddle and confusion of pre-war days because they have no vision or are too callous "to look round the corner." These various interested motives or lack of them, must not prevail. There can be no place in the Councils of Peace for the timid, the disinterested or the obstructionist; these are not tolerated in war, must we allow peace and reconstruction to be so guided?

We cannot afford not to plan; we cannot afford to muddle through for ever. Such a course would not pay, it would cost more in the end. It would not improve the health of the nation or of a city. It would not improve the mind or the body of a single individual or of any civic entity. Vast sums of money will, in any event, have to be spent on reconstruction; is it not better to guide the expenditure by a considered and comprehensive master plan?

The implications of planning are enormous, but neither finance, politics, personal interests nor adherence to worn-out preconceptions can be allowed to stand in the way for ever.

The L.R.R.C. have devoted time and work to a Regional Plan for Greater London because they are architects, trained co-ordinators, trained and experienced planners and designers. Many other trained minds must take part in the plan as it develops; that architects accept a role of co-ordination does not mean the many problems of engineering, surveying, law, finance, health, education, recreation, social welfare and the rest must not have exponents, co-operative experts who shall bring their own particular knowledge and experience to bear upon proposals for a better future.

Even this concentration of training and knowledge on the future plan is not enough. The Plan, any plan, cannot be implemented without understanding and backing of those whom planning is designed to help. As architects, the L.R.R.C. have faith in those who will have the future in which to live; they do not believe that the people of this metropolis, or this country, are indifferent, but the will to achieve must exist or planning is of no avail.

All those who wish to take their place in the building of a worthy future or would make themselves and posterity worthy, must assist in every way; it is not only the building and constructional industries that will be involved in post-war reconstruction and planning, it is for each and all to take part that the whole may be achieved for all and each.

These are some of the reasons why this work has been attempted while there is still time to think. To ignore the lessons of the past and to delay, means—failure.



The Centre

FUNDAMENTAL PRINCIPLES OF THE WEATHERING OF BUILDING MATERIALS

By F. L. BRADY, M.Sc., A.I.C., Liaison Officer D.S.I.R.—M.O.W.P.

A hundred years ago a study of the principles of the weathering of building materials would have been of little more than theoretic interest, since the number of materials used for facings was limited virtually to two—brick and natural stone. The properties of these facings were well understood and the architectural effects resulting from weathering were generally regarded as acceptable. To-day the position is different. New materials have come into use for facings and a desire has arisen for new types of weathering behaviour. Among the newcomers the chief group is that based on cement as a binder, which includes concrete, cast stone, terrazzo and all forms of rendered finish; glass and polished stone are other noteworthy accessions. The selection of materials being now wider, a statement of general principles becomes of greater interest and value.

A word or two regarding matter, scope and definitions is desirable at the outset. The discussion relates to those superficial changes in materials which affect the appearance of buildings and to the more deep-seated changes generally called "decay" which may affect structural stability. The term "weathering pattern" is used several times, which has been coined to describe, conveniently and briefly, the characteristic general appearance of the walls of a building after the "newness" has worn off. Portland stone buildings have a weathering pattern of alternate bands, horizontal and vertical, of light and dark—the former being the rain-washed areas, the latter the sheltered portions. A brick building has a weathering pattern on a smaller scale, produced by the differing degrees of discolouration of adjacent bricks and the contrast between them and the mortar. These general effects have by long usage come to be regarded as beautiful, whereas the impression given by some more modern materials is generally regarded as displeasing. There is no absolute standard of judgment; familiarity largely determines the observer's reaction. Our present concern is the origin of the visible difference.

The elucidation of the major factors involved in weathering has involved considerable research by many workers, the fruits of whose labours are now available. It is found that the principles are quite simple and capable of concise description, which may,

however, convey an inadequate impression of the mass of observations and tests upon which they are based.

Solubility

The first fundamental characteristic is solubility. Fig. 1 records the approximate value of this property for the important groups of building materials. At the higher extreme is gypsum, the basic component of plasters. The solubility is so high (one part in 400 of water) as to preclude widespread use, though it has been successfully used in external walls protected by caves and in relatively sheltered situations. Any considerable rivulet of water down its surface causes deep channelling and loss of strength. Gypsum is of interest because it enters into the weathering process of other materials. Limestones yield gypsum by reaction with atmospheric sulphuric acid and gypsum so formed can be absorbed by adjacent sandstone and cause decay of the latter by crystallisation. Soft brickwork can also be affected by crystallisation of gypsum, and local injury is being caused to the brickwork of Westminster Cathedral from this cause.

The shortage of timber in this war has necessitated the use of plaster-board as a construction material for external use in hutments, but the factor of solubility has precluded designers from accepting any paint treatment as a protective coating. When the base is so soluble as gypsum a higher degree of protection is necessary and the standard used is a facing of bitumen felt sealed with hot bitumen to the board.

At the other extreme is silica (quartz), which is virtually insoluble. The most favoured building sandstones consist practically entirely of this substance. Sandstones in town atmosphere slowly accumulate a film of soot which adheres to the stone with extraordinary tenacity, defying attempts to remove it by washing or scrubbing, or even by vigorous chemical attack. Even on parts of a surface frequently washed by rainwater the soot accumulates, and the result is the rather uniform blackening characteristic of sandstone buildings in North of England towns. Significantly, blocks of stone of inferior durability, whose decay causes a continual crumbling of the surface, show up as light patches on a dark background, emphasising that the slow washing away of the surface is the only method by which a building material preserves a clean surface in a contaminated atmosphere. Glass, igneous rocks such as granite and durable bricks fall in the same class as sandstones as regards their solubility and discolour in substantially the same manner.

The class intermediate in solubility, and the most interesting, includes the limestones, concrete and all cast concrete products, and lime or cement mortar. The familiarity of the behaviour of Portland stone directs attention to it as the prototype of this group. Where rainwashed, the surface is slowly but continuously dissolved. In this way surface deposition of soot is entirely prevented and the surface remains white. Far different is the behaviour in sheltered situations: here surface deposits of soot accumulate; but there are also other invisible but important changes. The reaction between the stone and atmospheric sulphuric acid yields gypsum, calcium sulphate, which forms an incrustation interpenetrating the soot layer and, to some extent, the stone. This may cause flaking, for the formation of gypsum from limestone is accompanied by expansion, which is capable of causing the whole incrustation to fall off locally at intervals. The total result is the common "soot and whitewash" weathering pattern of many buildings in southern England.

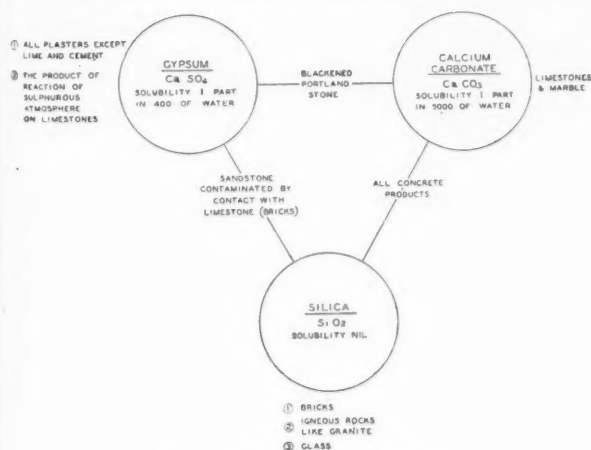


Fig. 1.—Solubility of Building Materials

Washing Buildings

Here a glance may be given at the practice of washing buildings. By regular treatment the development of soot films can be prevented, as is done at Goldsmith's Hall, provided the stone surface is somewhat soluble, otherwise the washing process will be much less effective. The Building Research Station has shown that by a special washing treatment, in which advantage is taken of the solubility of gypsum, heavy and disfiguring incrustations can be removed entirely. The method consists of subjecting the surface to a fine mist-like spray of water which softens the film and causes it to fall cleanly away, practically without any mechanical aid. An outstanding example of success with this treatment is the Admiralty Screen in Whitehall. Some bas-reliefs on this masonry were practically hidden by incrustation, whereas now the finest details of the sculpture are visible. Several other buildings were successfully treated, but the wider adoption of the process was interrupted by the war. Concrete can be cleaned in the same manner.

The behaviour of concrete and mortars can conveniently—and correctly—be regarded as intermediate between that of limestones and sandstones, the more open-textured lying near the former, the denser structural concrete nearer the latter. To trace in detail the chemical changes involved in the setting and hardening of cement and the subsequent effects of atmospheric carbon dioxide is unnecessary for the present purpose. Suffice it to say that the binding material in any concrete or mortar, where exposed to the air, consists of finely divided calcium carbonate (limestone) enmeshed in a network of insoluble substances—chiefly silica. Not only the binding material, but also the aggregate influences the weathering properties, and the range of effects exhibited can be represented in schematic fashion, as follows:—

Material.	Significant Factors.	Weathering Pattern.
1. Structural concrete either as cast or "surface-finished." Dense cast stone. Cement renderings.	Density and presence of silica and alumina in binder reduces solubility effects.	General irregular discolouration tending to "dullness" in absence of texture.
2. Open-textured cast stone and lime-cement renderings.	Use of siliceous aggregate inclines behaviour towards 1 (above). Use of limestones as aggregates in cast stone inclines behaviour towards that of limestone.	Rain-washed portions remain clean, sheltered areas darken.
3. Lime mortar.	Absence of silica and alumina in the binder increases rate of solution.	As 2 above and limestones. Fairly rapid solution in rain-washed areas.

In the above summary the effect of density, which will be referred to later, has had to be introduced, and it is obvious that, given two materials of equal solubility, the denser will be dissolved more slowly. The weathering pattern in this group, therefore, depends on an interplay of the solubility and density factors. The considerable range in density and composition puts at the disposal of the architect a great variety of types of material which can be selected according to requirements and the situation of a building. When selecting cast stone for use in highly polluted atmospheres the architect should favour the denser types containing insoluble aggregates; but he should not invariably select for high resistance. Where a weathering pattern more akin to that of limestone is preferred the more open-textured types should be sought. Advantage of these possibilities was taken by Sir Herbert Baker in the extensions to the Bank of England. Portland stone in slender members—such as balus-

trades—had decayed rather badly owing to the high atmospheric pollution; accordingly a choice was made of a special form of reconstructed Portland stone, cast in large blocks under pressure and then cut and carved like natural stone. The result is a synthetic stone having higher resistance to the City atmosphere than Portland, but having a "natural" appearance and a weathering pattern harmonious with that of the natural stone masonry. Such potentialities might be more widely realised and exploited.

In passing, a reference may be made to crazing, which is the chief objection to cast stone. Bonnell's work is showing that there is a limit to density if crazing is to be obviated. The work is yet incomplete owing to the diversion of interest to subjects of greater immediate importance, but it is hoped that this will finally be productive of valuable results by removing a serious obstacle to the wider use of this product. This work may well lead to the conclusion that great density, now almost universally regarded as a virtue, is really a fault! An associated result will be a more "natural" weathering pattern.

Water Absorption

Great importance frequently is attached to the property of water absorption—quite mistakenly—and it may be stated at once that this property *alone* is no index of any valuable quality of building materials, though it is so in combination with others. For example, a low water absorption moderates the effect of solubility—but not necessarily in a favourable direction from the architect's viewpoint. The view that materials increase in durability in the reverse order of absorptivity is false.

TABLE I
WATER ABSORPTION AND SATURATION COEFFICIENT OF BUILDING FACINGS

	Water Absorption % by Weight	Saturation Coefficient
<i>Facing bricks of good quality suitable for all conditions of exposure:</i>		
Hand-made (Bucks.)	20.1	0.66
First Stocks (Bucks.)	26.2	0.55
Seconds Stocks (Bucks.)	28.2	0.60
Wirecut Facing	4.6	0.49
<i>Defective bricks, under-burnt or otherwise faulty:</i>		
Soft red wirecuts damaged by frost immediately after erection ..	15.2	0.91
Decayed wirecuts from old building ..	14.7	0.82
Wirecut common, Ireland; low frost resistance	20.5	0.88
<i>Building stones:</i>		
Portland	8—12	0.6—0.9
Bath	16—24	0.6—0.9
Ketton Stone	14	0.6
Ketton Rag	8	0.85
Stancliffe	9	0.65
Ancaster	15	0.88

This is illustrated in Table I, where a selection of values for various facings is given. The range for the facing bricks of good quality is from 4.6 to 28.2 per cent. by weight and the total range is even greater. The range in natural stones is great. Cast stones and concrete show lower values on the whole. Between materials of closely similar character—for example, bricks from the same yard, concretes of the same mix—porosity may possibly serve as an index of variation of quality, but that is all.

From some points of view a degree of water absorption is an advantage. In renderings the benefit of absorptivity is that moisture running down the surface is mopped up by the facing and is therefore less likely to penetrate the almost inevitable hair

cracks caused by shrinkage. Hence the benefit of using mixtures of lime and cement, as compared with the dense, smooth cement, finishes. But architects will not be able to avail themselves of the advantages of such finishes so long as the practice persists of leaving horizontal projections in renderings unprotected and of carrying renderings over the top of brick parapets. In such conditions the absorptive finishes may be damaged by frost or may be loosened by penetration of moisture to the back of the stucco. If flashings are not used to protect horizontal surfaces, then the cement finishes, despite their poorer appearance and greater susceptibility to penetration, are safer.

Porosity

Porosity and water absorption are frequently confused. Porosity is strictly defined as the proportion (usually expressed as a percentage) of the volume of a body, not occupied by solid matter. It has no direct bearing on durability or weathering. Total porosity is of importance chiefly from the point of view of thermal conductivity. The differences in this respect between different facings, e.g., porous and dense bricks, is appreciable but not decisive. Total porosity can be measured in several ways: the simplest consists in measuring the water-uptake during prolonged boiling: the value so obtained is a close enough approximation for many purposes.

When porosity is related to absorption we obtain a valuable index of durability which is widely applicable. Fig. 2 illustrates the conception. The volume A is the total pore space. The

pores, the more a stone is subject to the injurious action of atmospheric sulphuric acid, the solution of its substance by rain-water and the risk of injury by crystallisation of salts. Broadly, then, weathering will be faster.

Scott Russell found it convenient to separate pores into those greater and those less than 0.005 mm. diameter, the former being called "macro-" and the latter, "micro-pores."

If limestones are arranged in the order of ascending microporosity it will be found that this is roughly the order of descending durability. The experimental values for two stones are exhibited in Fig. 3. The low relative microporosity of Portland stone—one of our most durable limestones, is significant. In the less durable of the Bath stones almost the whole pore volume is in the form of fine pores.

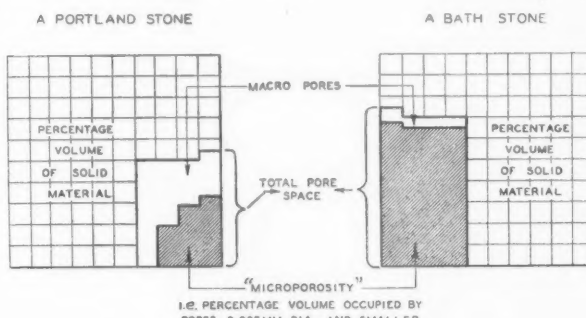


Fig. 3.—"Macro" and "Micro-pores" in natural stones

These factors have important practical applications. They were used in selecting the Clipsham stone for the repair of the Houses of Parliament. It was necessary that stone used for the repairs should not only reasonably match the original stone in colour and texture, but that it should have a good resistance to crystallisation. Portland stone was inadmissible because of colour. Sandstones, though excellent as regards colour, would have failed due to crystallisation of salts derived from the original stone. Clipsham stone had a good reputation and was suitable in colour and texture. Laboratory tests confirmed that the pore characteristics were satisfactory, and from time to time tests have been applied to confirm that the standard of stone produced by the quarry was being maintained.

The methods have also been used for the selection of stone for statuary, which, being extremely exposed to weathering influences, must be chosen with special regard to durability. Sculptors who select stone on the basis of evenness of texture or colour alone, neglecting the durability factor, may sacrifice the permanence of the work. Time quite soon reveals that science can play a part in ensuring the endurance of works of art.

Texture

The last but not the least important factor to be dealt with is texture. For the most part its influence is manifested on the weathering pattern only, and it is without effect on durability—with one notable exception. In concrete finishes of every sort the common desire for a smooth texture increases the liability to crazing. This is true both of cast stone and renderings. A smooth texture necessitates in the former a dense mix, in the latter a final surface trowelling, both unfavourable factors.

Smooth textures may appear attractive when a building is new, but on exposure to the weather the rougher textures show up to greater advantage.

On a smooth surface water running down the face of a building forms a series of streams which follow nearly the same course in every shower. The contrast between rain-washed and "dry" areas produces a most disfiguring streakiness. This is moderated

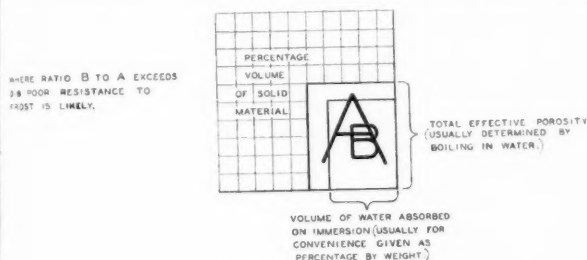


Fig. 2.—Water absorption, porosity and saturation coefficient

smaller volume B is the water-absorption. Now if a soaked porous body is frozen the contained water will expand to occupy a new volume A ninth larger. If the pore space A is sufficient to receive the increased volume there will be little disruptive effect: if not destructive stresses will be set up. Experiment shows that the true upper limit of the ratio B/A for a range of bodies is from 0.8 to 0.85. This factor is known as the *saturation coefficient*.

Reference to Table I demonstrates the diagnostic value of this factor. In bricks low coefficients are associated with good resistance to frost, which renders a brick suitable for use in parapets, footings and retaining walls: high coefficients, often indicative of poor burning or an undesirable physical structure, are associated with poor resistance to frost and liability to powdering and flaking. A specification for bricks is much to be desired, and at one time there seemed a prospect that this could be achieved on the basis of saturation coefficient and strength; but there are makes of brick which would not be correctly graded by such a scheme, and it is evident that the search for the fundamental determinants of durability in bricks is not yet ended.

Kinds of Pores

In natural building stones, the *kind* of pores is as important as their total quantity and the *proportion* of pores of different sizes is an indication of durability. Why this should be so is not difficult to see. Where the pores are very fine, so also must be the state of sub-division of the solid substance: the solid surface exposed on the sides of the pores will be doubled for each halving of the pore diameter if the total volume of pores remains the same. This is one reason why, the greater the content of fine

by a heavily textured surface, which breaks up and diffuses the water streams, so reducing contrast. The design of parapets, string courses and cills has an important influence. In traditional designs the use of drips had the effect of throwing the rain stream clear of the wall at every projection. These are now frequently omitted and, for stylistic reasons, horizontal projections are formed without flashing or drip. The ledge so formed collects dirt, bird droppings and soot, which is at intervals washed in a series of streams down the face of the work, with results which may be seen in a number of recently completed buildings. The provision of a flashing with an inconspicuous drip or a return to a more traditional treatment of projections will cure the trouble.

This is not to suggest that no variation in the customary texture of the natural stone or brick facings is required. The appearance of certain makes of bricks has been greatly improved by an artificial texturing process. The need is greatest in the new facings which have cement for a binder.

Davey has published results of a number of tests on the rate of darkening of concrete surfaces during four years' exposure to the London atmosphere. Bush-hammered surfaces discoloured more rapidly than smooth during the first year, but during the next two or three years changed only slightly. The difference in rate of discolouration between rough and smooth surfaces is, however, much less than might be expected, and what is important is not the *average* discolouration, but the *variation* in discolouration from point to point. Where the darkening is uniform a considerable change can be tolerated; a streaky discolouration of lower *average* amount may be very unpleasant.

The texturing of renderings much improves their appearance and behaviour. One method is scraping; another, introduced just prior to the war, is a machine-applied roughcast which gives a very bold, deep texture.

Unsound Criteria in the Selection of Materials

The foregoing discussion indicates some of the criteria the architect should employ in the selection of materials for facing buildings: conversely, it indicates the fallacy of some of the tests at present employed.

For example, in selecting bricks, an immersion test is used, and it is required that a brick shall not absorb more than some given percentage of water, which is sometimes stated as 8 per cent. and sometimes as 10 per cent. The water absorption alone cannot be taken as an index of quality. The most that can be said is that bricks of low absorption are usually good, but that does not mean that bricks of high absorption are not good. Some of the most reliable bricks absorb three times the limit stated.

In other cases bricks are judged on the basis of strength. Again strength alone is no guide to durability, and durable bricks by no means always show the highest strength. With Portland stone the beds with the highest strength are not those of greatest durability.

Mortars, too, are chosen for high strength, in the belief that this will make for strong brickwork. Actually four-fifths of the cement in cement mortar can be replaced by lime before a material drop in strength of brickwork occurs.

With these materials it is vain for the architect to attempt to do his own testing. For guidance in such matters he must depend on the expert, and in judging unfamiliar materials he must rely on an opinion by a competent testing authority based on a group of tests which embraces all the essential factors.

The poor behaviour of cast stone is in some measure due to the false standards of judgment which are employed. Presented with a sample for inspection, the architect pours a few drops of water on the surface. If the water is quickly absorbed the material is criticised as too porous. Yet few natural stones, except granite, would pass the test, and natural Portland stone, for example, would fail lamentably. The manufacturer of cast stone meets the demand by offering a sample of a dense mixture containing a good proportion of fatty waterproofer. The water

applied to the surface then runs about the surface like mercury and refuses even to wet it; the sample is then regarded as highly satisfactory. Again, with the desire for a close imitation of Portland stone, a smooth or fine-textured surface is chosen. The results are often disappointing. The material develops a greyish yellow discolouration, often further marred by streaks and disfigured by crazing. A moderate degree of water absorption will improve the behaviour in each of these respects. A bold texture, which in a hand sample would look grotesquely coarse, may be very acceptable in the building.

The problem of selection of materials will become very prominent in the repair of masonry buildings defaced by shell splinters. There will be no difficulty whatever in effecting a durable repair, harmonious in colour initially; but this is the smaller part of the problem. To select a mixture which will weather harmoniously will require a skilful adjustment of porosity. It can be confidently forecast that many repairs will be made with far too dense a mix, which on rain-washed areas will stand out as dark patches and in sheltered areas as light patches, constituting a permanent disfigurement. An invisible repair is hardly to be expected, but a reasonable harmony should be obtainable if the necessary steps are taken.

A Chimæra

The fabled chimæra was a goat with a lion's head and a serpent's tail. All the attempts at its capture proved unsuccessful.

A similar pursuit is in progress to-day—the search for a facing which will maintain a uniformly clean surface in the polluted air of towns. This search also has proved vain. The point of the myth is that the characteristics of the monster were mutually incompatible. The failure of the hunt for the ideal facing results from the same cause.

Even a perfectly smooth and impervious surface such as glass or polished granite will accumulate soot films, and, unless washed at intervals, will fail to preserve the appearance intended by the designer. Great hopes have been placed on Terrazzo finishes. These, too, have been found to require cleaning at intervals, plus a waterproofing treatment to prevent surface solution.

The Regency stucco was maintained by periodic painting—a costly operation. Regular painting constitutes one of the methods that can be used to preserve a clean appearance, but is now unfashionable.

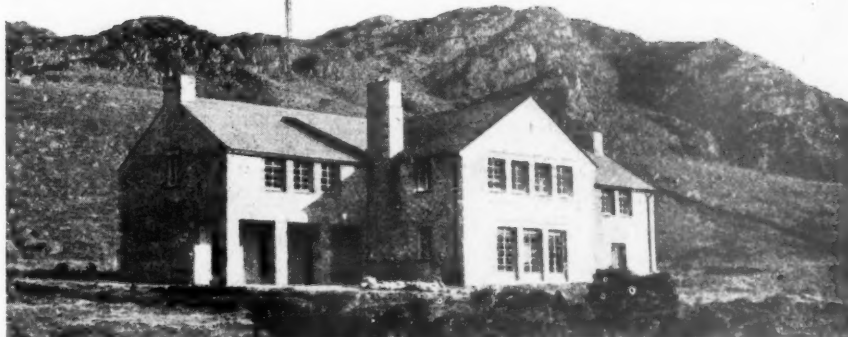
The third method is the selection of materials whose texture and solubility characteristics will produce an aesthetically satisfactory weathering pattern which will not require any maintenance.

From what is known of the properties of materials, no alternative method is conceivable at the present time, and much disappointment will be saved if the fundamental factors which lead to this conclusion are accepted without reserve.

Acknowledgments

The attempt has been made to summarise briefly the essential factors in the weathering of building materials. So great compression has necessitated many partial statements, numerous omissions and considerable over-simplification. It would have been for the author a more satisfying task to devote the same space to a more detailed discussion of the behaviour of some restricted group, but if the present survey provides an acceptable general introduction, or framework, which can be clothed by subsequent study, the aim will have been secured.

In conclusion, an acknowledgment is due to the publications of colleagues who have pioneered in the field, and whose ideas have been freely drawn on, particularly Schaffer's *Weathering of Natural Building Stone*, the first volume of Fitzmaurice's *Principles of Modern Building*, and a recent paper by Davey in the *Journal of the Institution of Civil Engineers* (1942) on "The Surface Finishing of Concrete Structures," which may be consulted on this topic with profit.



HOLIDAY USE OF COUNTRYSIDE & COASTLINE

By JOHN DOWER [A.]

An address given at the R.I.B.A. on 31 March, as the fourth in the series of six lectures on Town and Country Planning arranged by the R.I.B.A.

The holiday use of the countryside and coastline is quite as big an issue as any of the others dealt with in this series of lectures, and I do not need to apologise for talking about it here to an audience which I expect is composed mainly of architects and planners, or would-be planners. It is only necessary to scratch the surface of the subject to find oneself right in the field of town and country planning, or at any rate the country part of it. What do I mean by the field of town and country planning? It is the field, as I see it, of the proper use of the land and its natural resources and qualities. It is the field of the relating together of the various uses of the land in an intelligible and efficient and healthy and beautiful series of patterns and forms, always evolving and changing in the service of and in reflection of the economic, social and cultural needs of the people. It is also, of course, the field of the necessary system of law and administrative control and technique.

It is not possible to go very far into my subject without finding a great deal to concern the architect as distinct from the planner. In quantity the architectural requirements of the countryside in general, and of the holiday use of it in particular, are small compared with the architectural requirements of our towns and their immense reconstruction programmes; but by the very fact that the quantity is smaller, the quality and significance of architecture in the countryside become all the more important. A good deal of third-rate architecture can contrive to pass muster if it is, so to speak, in a crowd, under town conditions; but a piece of third-rate architecture standing alone in a fair landscape shows up very plainly for the sorry thing that it is.

I will start with the broad claim that holiday use of the countryside and the coastline, if generously encouraged and facilitated and wisely controlled and directed, may be one of the most fruitful objectives of post-war reconstruction policy, and second to none in the prospect it gives of physical and mental and spiritual health and happiness for the whole mass of the people. It is a question, I would emphasise, of encouraging and facilitating and controlling and directing; it is not a question of creating the demand for country and seaside holiday-making by the mass of the people. That is there already. It was already large and rapidly growing before the war, and is likely to grow again even more rapidly after the war. It reflects three of the most significant popular movements of our time. All three movements were plain enough before the war; all three have been obscured but are, I think, still piling up during the war; and all three are likely to develop again on an even bigger scale after the war.

The first of these movements is the steady increase in leisure and in the demands and opportunities for holiday-making, whether it is a matter of single days, week-ends, weeks, or even fortnights away from home, by the mass of the people. The war has cut all that down; we are now encouraged to take no holidays at all or at least to take them at home. But after the war, there is bound to be a very rapid expansion of the Holidays with Pay system, which is already on the statute book, and which I think is certain to become almost universal within a few years after the end of the war. We may be pretty sure that peace will bring an unprecedented flood of holiday making, rising rapidly to double or more than double the volume of pre-war days.

The second movement is the ever-widening popular appreciation of natural landscape beauty, and the ever-growing desire to visit and to take exercise in beautiful countrysides, especially in the wilder places—in mountains, moorlands, heaths and downlands, and particularly along all that is left unspoiled of our coastline. You may doubt my claim that this is a growing movement, in view of the undeniable fact that, concurrent with it, there has been a growing destruction of the natural beauty which the people are out to find and to enjoy; but I am sure that there is this ever-growing popular appreciation. If people enjoy a thing and seek it it does not necessarily follow that they are good at preserving it: a great many more children are spoilt by being doted on than by being neglected!

The third and most obvious movement is the rapid advance in mechanical transport, still very far from any limit, which gives (or promises to give, if certain snags and bottle-necks can be overcome) easy, quick and relatively cheap access for vast numbers of people to all holiday areas even in the remotest parts of the country.

All three are popular movements, good movements, and irresistible movements; but, fortunately, that does not mean that they are uncontrollable movements, or that they do not need a good deal of control and direction, quite as much as they need facilities and encouragement.

Preservation of the Countryside

I will take the control and direction side first. That, of course, brings us straight into the planning field. How essential it is to control and direct the holiday-making of townspeople in the country I need hardly emphasise to an audience which is doubtless almost exclusively composed of those who are already converted to the cause of planning and of landscape preservation, and to

the importance of visual form, good building and good development as an element in the country just as much as in the town. We all know how blind and self-stultifying and regardless of consequences the townsman's holiday and other use of the countryside can be, when undirected and uncontrolled; how often ignorant and insensitive "country-lovers" have destroyed or smirched the very thing—the beautiful countrysides—which they wished to enjoy, building their bungalows in beauty-spots, ribboning their week-end cottages and shacks and camps along all the best bathing-beaches, and cluttering up rural roadsides with the roadhouses and cafés and car parks and advertisement hoardings which pander to their lower tastes.

To take another matter; the ubiquitous motor car is obviously, in many ways, one of the greatest blessings of the age, not least for the opportunities it gives for holiday-making, but in other ways it is quite certainly one of the greatest curses of the age (when you add the aeroplane, I personally could well wish that the internal combustion engine had never been invented!). Of the many evil consequences I need mention only one—the holiday season condition over wide areas which makes it impossible to enjoy any country peace and quiet and clean fresh air in or near any place where motors can go, or to walk the highway with any safety and comfort.

In fact, in these and other ways, the first issue that we have to face is simply this: how are we going to open much more fully to the whole people the beauty and the peace of the still unspoiled districts, both inland and coastal, which they wish to enjoy, and at the same time to preserve that beauty and peace from being steadily disfigured and destroyed? This is not an insoluble problem. It is not the only nor, probably, the most difficult, but it is plainly the first and most urgent problem that arises under my subject; for I am quite sure we have to face the fact that, though we may hold up for a while certain more dangerous forms of positive encouragement of rural holiday-making, there is no possibility at all of any effective discouragement of the townsman's holiday impact on the countryside. We may be able to control the flood, but we certainly cannot dam it.

That, then, is our first job: to keep the countryside intact and unspoilt. It is a job which obviously has two sides to it, which I can conveniently call the negative side and the positive side. The negative side is, of course, the familiar job which many planning authorities, the Councils for the Preservation of Rural England and Rural Wales, and a good many other bodies were trying so hard, but on balance, I am afraid, so unsuccessfully, to carry out in the period between the two wars; the job of preventing and minimising, and where possible removing or hiding, every kind of ugly or misplaced building development or use of land. There was an immense variety of things which could go wrong, and most of them did go wrong somewhere or other. It wasn't only private enterprise and industrial enterprise that were to blame; the sins of public bodies, if less numerous, were usually on a larger scale. It was a matter, not only of bungalows and advertisements and obvious things of that kind, but of ill-placed and ill-designed improvements and "furniture" on the roads, of unnecessarily ugly waterworks, of electricity pylons and poles, of mines and quarries with their spoil-heaps, and of the wrong sort of afforestation—uniform spruces in sharp-edged regular plantations, where varied hardwoods, larches and Scots firs in irregular formations, would have been an enrichment. Of course all, or nearly all, these things are necessary and desirable somewhere, though not, needless to say, in any avoidable ugliness of form. But it matters enormously *where and how*.

I am not one of those who would say that not one acre more of England and Wales should ever be urbanised. It is, I hope, now an accepted principle of our planning policy that we must shake out the congestion of our largest cities and create better-sized and better-balanced urban communities. This means that we must have a great deal of new development, of villages growing into towns, of small towns growing into larger ones and, in some few cases, of entirely new towns on more or less virgin sites. But let us go about the job intelligently; let us decide on a carefully

worked out basis and with due economy, so as to interfere to a minimum extent with agriculture and with recreational uses, what further land is required for urban purposes for, say, a generation to come; and then let us keep all the rest as real country, used primarily for the life and livelihood of farmers and other countrymen, and secondarily for the recreation of the town-living masses.

The Maintenance of Farming

I turn to the positive side. All this negative work of planning control will be of little avail unless it has a positive counterpart. If the country is really going to remain a lovely and living thing it must be not only preserved but maintained and reclaimed and improved and enriched. If the country does not go forward it will go back. In brief, this means that we have to farm the country and farm it well; to keep the land "in good heart." I am not myself a farmer but I am second to none in the conviction that a progressive "improving" agriculture (including a due measure of afforestation) must be the first consideration in all our countrysides—not merely the best land, or the land that pays best for the farmer, but *all* the land except that small proportion which we earmark in our plans for urban use. And it must not be a farming that just "ticks over," because farming, like the land itself, if it does not go forward, will certainly go back.

Between farming and the preservation of landscape beauty, and between farming and a sound and greatly increased holiday use of the countryside, there is no major conflict of interest. On the contrary, in general—there are bound to be some exceptions—there is mutual support and benefit between farming on the one hand and landscape preservation and holiday use on the other. Nevertheless, it must be a first consideration, in the framing of any policy for the recreational use of the countryside, that it must not interfere with the maintenance and progress and prosperity of farming.

As to the progress of farming, it has struck me forcibly that the wide and revolutionary changes due to the war, in intensified cultivation and an enormously increased use of the plough, has been from a landscape point of view all to the good. The landscapes that I know best, for instance, in the Craven district of the Yorkshire Pennines and on the fringes of the Lake District, have been enriched and improved, not spoilt, by being, to such a large extent, turned "brown side up."

Among the many aspects of progressive all-round agricultural policy, the architectural is by no means the least important. More and improved and refurbished farms, farm buildings and, above all, farm-workers' cottages, are among the major needs of agricultural advance, and the architect has a vital part to play in seeing that these are properly provided. Incidentally, while we build new farm workers' cottages and modernise old ones, there will be another point to watch. Whatever accommodation we may provide in other ways—and we have a great deal to provide—for the holiday use of visitors, one thing which we must not do is to make any further inroads on the present inadequate stock of farm workers' cottages. In nearly all the "amenity" and holiday areas far too many cottages have been "bagged" from farm workers by week-enders from the towns.

Types of Holiday-Makers

To come now to the holiday-makers; fortunately it is not by any means *all* the town-living masses of the nation who want to take their holidays in the country, whether inland or in the country parts of the coastline. If it were all, the prospect would indeed be alarming, both for the beauty and quiet of the countryside, and for the farming of it. The genuinely "country-holiday-minded" people are indeed a vast and growing army, but they are—and I believe long will be—easily outnumbered by the other army, the army of those who by taste and temperament are really "urban-holiday-minded," who like to take their holidays in a noisy, cheerful crowd, who want to wear their best clothes and walk up and down the promenade. Blackpool and Brighton and a hundred other resorts, coastal and inland, are what these people want; and most of them know it perfectly well. Quite how big the total volume of the post-war holiday flood is going to be we

cannot possibly tell now. It will certainly be big enough to strain all our holiday accommodation and resources to the utmost. But it is some comfort to feel that the greater part of it will fall, not on the countryside, but on the holiday towns. To satisfy the demand we shall need bigger and better Brightons and Blackpools and more of them, supplemented by ample parks, recreational centres and the like, in or near all our cities and larger towns. All of which means a huge architectural and planning programme bristling with problems and opportunities—but not my concern this evening. I am reminded of the Nonconformist local preacher ranting in his chapel, who said: "The Lord Himself will have to save church folk, without my meddling with His job." The "urban-holiday-minded" are somebody else's problem, not mine—except in one negative, though important, way. This is to urge that we must *not* provide in the country the sort of facilities and encouragements that the "urban-holiday-minded" ask for, because, if we do, the country will cease to be the thing it is. There must be a very firm line drawn, and, while suitable facilities for the "country-holiday-minded" are generously provided, there must be no question of making lidos along Lake Windermere, fun parks on Dartmoor, or recreation centres, equipped for every kind of sport, in the heart of the New Forest.

Holiday Facilities

So much for the controlling and directing side of the business. What about the facilities and encouragements which should be given for the genuinely country-holiday-minded visitors, whom we want to encourage to come and enjoy as fully as possible the country and the unspoilt coastline? I have time only to consider the four most important of the many kinds of provision that are needed, to comment very briefly on three of them and a little more fully on the fourth, which most concerns architects. The four are: (i) more and cheaper and better accommodation (this obviously comes first, but I shall take it last because it is the one about which I want to say rather more); (ii) more and, within reason, faster and cheaper transport to the holiday areas, which means, among other things, an improved road system; (iii) more, better arranged and better maintained public footpaths *through* the cultivated farmland of such areas; and (iv) more free wandering access for walkers *over* the uncultivated land in such areas—the mountains and moors and heaths and the rugged coast-lines.

About transport I will say only this: that the very necessary improvement of roads and services leading to the holiday areas of the country is one thing, but improvement of roads and increase of traffic *within* the holiday areas is another and very often quite different thing. There must be some improvement, but let it be a selective improvement. Do not let us make every mountain pass impossible for the walker by putting a first-class motor road over it. Let there be a sorting out of all the ancient cartways and pack-horse routes that we inherit from earlier ages; let a few of them go to motorists and be improved for their use, but let all the others be definitely closed to motorists and kept as walkers' and cyclists' routes.

I come to footpaths. Here we have an obvious and urgent need for a completely new approach; for a new broom that will sweep away the mass of legalistic obscurity which has grown up round footpath controversies. We have to apply some plain common-sense to the subject. In some places there are too many footpaths; in far more, the footpaths are too few; and almost everywhere there is far too much uncertainty about which routes are, and which are not, public rights-of-way. What we want is an ample and assured position of public footpath routes in all parts of the country, continuous routes without arbitrary breaks in them, routes suitable both to residents and to visitors, and routes which are properly maintained and signposted. In most areas this will mean that there will be some entirely new routes, that the bulk of the old routes will be maintained, with or without some variation of their alignment to make them more convenient to farmers and to walkers, and that a few useless and redundant routes will be closed. Then, when the pattern has been so sorted out, we must make it fully and clearly the duty of *one* set of authorities over the whole country to maintain and manage the

whole system. At present, there is no one set of authorities responsible; virtually all local authorities, from parish councils upwards, have partial and, in the main, permissive powers.

The next matter, that of rambling access over uncultivated land, is of widely varying incidence and difficulty. In some holiday areas it is not a problem at all. You can wander freely over all the fell land of the Lake District, whether it is common land or enclosed land. It is not a matter of public right but of long-established local custom. There is very little trouble in the limestone areas of the Pennines, in Snowdonia or in Dartmoor. On the other hand, in the Peak District, which is ringed round with teeming industrial populations in Manchester, Sheffield and other large cities, anxious to walk freely over the moorlands, it is the main problem of the future recreational use of the area. The owners of practically the whole of the moorlands are stoutly opposed to any rambling access at all. For other reasons—largely lack of continuity—there is a good deal of difficulty in getting satisfactory rambling access along on the coastline.

This is not a farming problem. Where land is of mountain, moorland or other rough "uncultivated type," no material harm can come to farmers merely because walkers wander freely over the land. The real problem issues are two: the issue of ramblers against grouse shooting, and the issue of ramblers as possible polluters of upland-gathered drinking-water supplies. Both issues have been exaggerated by controversy, but do present real difficulties to be overcome. As myself both Rambler and Grouse-shooter, I want both rambling and grouse-shooting to go on, and, generally speaking, I do not think there is any reason why, with a little give and take, they should not go on side by side on the same moorland areas. The well-known Ilkley Moor is a common in an urban district and as such cannot legally be closed to ramblers; in fact very large numbers of ramblers do wander over it freely, but it remains one of the best of the smaller grouse moors. As regards water supply, there is no doubt that water supply can be made perfectly pure and safe by proper "treatment"—filtration, ozonisation, etc. It seems to me that, if there is some infinitesimal risk of water-borne disease passing from a remote stream through large reservoirs and along pipes to the domestic tap, we ought not therefore to close our moors to ramblers, but to open them and to take the necessary steps to treat the water so as to render it perfectly safe.

Lastly, accommodation. There will be needed a very greatly increased amount of all sorts of eating and sleeping accommodation in the holiday areas, and especially of cheaper and simpler types. There will be scope, I am sure, for at least double the pre-war number of Youth Hostels. There will be scope for a great many more co-operative guest houses of the type run by the Holiday Fellowship and the Co-operative Holidays Association. I hope that there will be scope for some increase in that most delightful of all types of accommodation, the farmhouse that takes in one family at a time. There will be scope for more and better boarding houses and inns and hotels. And there will be scope for a good many tent-camping and caravan sites, and huddled holiday-camps.

In sum, this will involve a good deal of new building, and even more additions to, and alterations and adaptations of, existing buildings, including country houses too large for post-war family use, and other buildings of "white elephant" types, most of which are now fully occupied for evacuation and other purposes, but which will become available again after the war.

If I single out from this list Youth Hostels and holiday camps for further brief comment it is not because they are necessarily more important than the other types, but because I had some small experience in dealing with them as architect in pre-war years.

Youth Hostels are a particularly interesting form of accommodation which offer great opportunities to the architect for significant work. I have not enjoyed any of my jobs more than my three Youth Hostels. At the same time I must add that, although I think that I built them economically, I have also been concerned with several schemes for the purchase and alteration of existing premises as Youth Hostels, and that these worked out at little

over half the cost per bed of the entirely new buildings. So the main emphasis may well have to be rather on adapting old buildings than on building new ones. Many of the agricultural hostels which have been built in a good many parts of the country are eminently suitable for conversion into Youth Hostels after the war, if they are not still wanted for agricultural workers.

Holiday camps offer enormous possibilities, and there is likely to be a very big demand for the type of holiday that a holiday camp provides; but they are distinctly dangerous things. A beautiful stretch of unspoilt country, whether coastal or inland, may take comfortably a discreetly-placed holiday camp for 200 people, but it is likely to be completely upset—and the whole character and balance of the neighbourhood with it—by a holiday camp for 2,000 people or more. Obviously such camps will want the most careful control not merely as to their design—though that is important—but as to their sheer size, and the sites that are chosen for them. As a general principle it will be wise to keep holiday

camps rather at the fringes of the beautiful areas than in the centres of them, and, where it is a question of seaside holiday camps, to keep them back at least a quarter of a mile from the shore or cliff edge, in order to keep the actual coastline free from building development.

I must close with a word of warning. Control, direction, encouragement, facilities—to sum up, planning—yes; but do not let it be carried a stage further and become regimentation. Planning is a means, not an end. People must be left to choose their holidays freely and to move about individually as they feel inclined, not in conducted herds. I suppose we are in for a pretty thoroughly “planned” future, and it may be that in large parts of our life, and particularly the economic parts, we are going to be planned pretty nearly to distraction. Let us at least see that in our holidays and our leisure we retain, behind whatever planning we adopt as a matter of convenience and common-sense, an ultimate and basic freedom of action for the individual, the family and the voluntary group.

THE TRAINING OF THE POST-WAR BUILDER

(SUBMITTED BY A MEMBER OF THE A.S.B.)

As many members of the profession will be aware, discussions went forward at the Ministry of Works during the whole of last year aimed at developing post-war plans for dealing with the supply and training of builders and craftsmen for reconstruction building. An Education Committee was established under the Central Council of Works and Building, the chairman being Sir E. D. Simon, with Mr. Percy Thomas [F.] as vice-chairman.

The “Report on Training for the Building Industry” (now available of H.M.S.O., price 1s.) was completed in November and presented to the Minister, Lord Portal, for his consideration. Following consultations with representatives of the industry and with other Government Departments, a Command Paper on “Training for the Building Industry” (Cmd. 6428, price 1d. of H.M.S.O.) was presented to Parliament a short while ago.

The Government proposals embodied in the Command Paper are of a striking character and of obvious importance to the profession, the industry and the community generally. They go into considerable detail regarding the methods of recruitment, education and training, both of young persons as apprentices and of demobilised men from the services. They also embody plans of a far-reaching character concerning both the scale and nature of post-war building.

Thus, as the White Paper states,

“It is fully recognised that if the necessary expansion of the labour force is to be achieved without disorganising the industry, it must be carefully planned in relation to a long-term programme of construction. The Government are working on this principle and are drawing up their plans accordingly, but it will be realised that at this stage of the war any construction programmes must be provisional. . . . On the basis, however, of all the facts available at present it is considered that a post-war construction programme designed for ten or twelve years will require the labour force in the building industry to be built up over a period to about 1,250,000 men.” The need for establishing regularity of employment throughout this period is stressed, and the help of the Government is offered to the industry in achieving this. The Report also stresses the need for the selection of recruits of all ages and for their training to be undertaken “with jealous care for the efficiency of the industry.”

In order to build up the numbers employed in the industry to the required total of 1,250,000 the Government will prepare plans for special training in the skilled trades of up to 200,000 men from the services in the first three or four years after the war. This number has been arrived at after allowing for the men likely still to be employed in the industry at the end of the war and of those who have had previous experience in the industry and are enabled to return to civil employment.

A Building Advisory Panel is to be set up to advise the Ministry of Labour and National Service in respect of this special training, for which he will be directly responsible, but will collaborate with the Ministry of Works, the Board of Education and the Scottish Education Department. The industry is to be given adequate representation on this Panel to secure effective co-operation in the working of the scheme.

Regarding the normal and long-term recruitment of the industry by the employment and training of young people, “the Government fully endorse the view that, in the building industry, a high value attaches to the apprenticeship system as the recognised method of training in employment and of entry into the ranks of the skilled workers.” Proposals were made in the Report for the setting up of a “Building Apprenticeship and Training Council,” representative not only of the industry, but also several Government Departments and a number of professional institutions having interests allied to building and including the R.I.B.A. Since the issue of the White Paper it has been announced that this Council is to be established under the independent chairmanship of Sir Malcolm Trustram Eve and with Mr. E. J. Rimmer as secretary. It is likely that its constitution and membership will be announced shortly. The Council will not itself conduct apprenticeship schemes, nor will it, in fact, be limited merely to the consideration of apprenticeship problems, but it will seek by various means to encourage the establishment and development of schemes of education and training for all grades of occupations in the industry, including training schemes for those preparing for supervisory and managerial positions. In this connection reference may be made to the recent announcement by the Minister of Labour and the President of the Board of Education of a scheme whereby suitable men and women, on demobilisation from the services, will be encouraged by various grants to pursue courses of a general, professional or technical character beyond the secondary school stage. These facilities will presumably be available for men proposing to equip themselves in the higher ranges here envisaged, including university courses in building.

It will be seen that these proposals are of a striking character which, if effectively and imaginatively handled, should lead to interesting and valuable results for the profession, the industry and the community generally. Here are proposals which at one sweep offer a planned basis for the satisfaction of the country building needs, a handsome contribution to the rehabilitation of our fighting men when they return from the war, a new hope for the future for young people in this interesting and socially useful field of construction, and finally the possibility that, in one industry at least and that one of the largest, the threat of “mass unemployment” may be removed.

The various Committees of the R.I.B.A. have already done much to indicate that the profession is fully aware of the nature and scale of the post-war problems. They have put forward suggestions from time to time, some of which touch these Government proposals at a number of points. Now that, happily, we have reached the stage when action is called for and not merely advice, it is to be hoped that the profession will prove itself equally far-seeing and dynamic and will do its utmost to assist in the full development of these striking proposals.

Book Reviews

The Training of the Architect. A Memorandum by Martin S. Briggs. London, H.M.S.O. 1943, 9d. net.

Mr. Briggs' memorandum becomes available at a time when much is being said and written about the training and professional activities of the architect. It provides a thoughtful and critical survey of the many sides of the architects' work, a review of the systems of architectural education and examination in England and Wales, and an interesting commentary on the curriculum.

It is doubtful whether any other writer could draw upon such a wide and lengthy experience, including as it does many years of service as a Board of Education Inspector of Technical Education, following upon professional and teaching activities in architecture.

Mr. Briggs has served for many years on the Committees of the Board of Architectural Education, where he has been able to compare the growth of the recognised schools with the activities of part-time art schools and technical colleges which prepare students for the "external" Institute examinations. His comments and conclusions are, however, purely personal, and even if one cannot agree with them in their entirety, it is impossible not to read and study them with absorbing interest. He does not hesitate to express opinions upon such vital and contentious matters as the impact of "sociology" and scientific research upon the training and work of the architect, and the relationship between the architect and engineering consultants, while his references to the merits and defects of full-time school training and office training invite the careful consideration of all who are interested in education.

The memorandum includes many quotations from lectures and writings on the subject; these are interesting and at times amusing. On page 29 is an intriguing reference to *Mein Kampf*, wherein the reader is invited to ponder upon the possibility that if Adolf Hitler had been allowed to achieve his ambition to become an architect he might not have become a political agitator and we should have been spared the present war!

The memorandum must be studied by all who would venture to criticise existing systems of training or evolve new ones. It confirms what many have already discovered, that the ramifications of present-day practice are such that no one mind can deal successfully with every problem which may be encountered in modern building, and for the efficient solution of which the architect must feel himself morally if not legally responsible. Not the least difficult of the tasks which confront the profession is that of deciding the nature and scope of the problems which are exclusively the responsibility of every architect, and those which should be entrusted to specialists. Whether or not certain of these specialists should be created by post-graduate training within the ranks of the profession is a matter for interesting speculation, but it would appear certain that many advantages might be gained by the employment of consultants or collaborators having a sound and complete architectural background.

To re-quote from the memorandum, "Architects must think, must correlate, must integrate. If the architects are supplanted by another profession tomorrow, it will be because they have ignored world changes."

It only remains to congratulate Mr. Briggs upon an extremely valuable and interesting document, which is recommended to all who have the welfare of the profession at heart.

THOS. E. SCOTT [F.]

War Over West Ham: a study of community adjustment. By E. Doreen Idle. Sm. 8vo, 136 pp. 1943. Faber & Faber. 6s.

This report, prepared for the Fabian Society and the Ethical Union, contains the results of an important and new field of social research—what in "total war" happens to ordinary people?—what, in West Ham one of the largest and poorest of London's Boroughs, are the special events and developments which created conditions relevant to the study of air-raid effects?

—this is the fundamental "case history" without which no satisfactory diagnosis of present ills can be made. Having analysed this case history of the stormy industrial and political life of West Ham, which has grown from an entirely rural and agricultural district to a huge industrialised borough in 110 years, Miss Idle attempts answers to three questions—what were the effects of past West Ham events and developments as shown in A.R.P. and C.D. administration,—what were the reactions of the people—what will be the particular problems likely to confront West Ham under reconstruction schemes.

West Ham's history of unplanned development and unorganised labour, resulting in badly built and vulnerable houses, overcrowding and poverty, exceedingly complicated the work of the local authority in tackling their war tasks. The borough, it would seem, was in such a state of decay that even the political and administrative bodies were atrophied; conditions had driven out or kept away those who could have worked most ably for it. Miss Idle isolates certain needs; greatly increased social and recreational facilities are needed, especially for adolescents, and she has other suggestions with regard to civil defence and raid relief organisation. In our present mood, however, most attention will be paid to her suggestions for the post-war period and preparation for it. Housing and replanning are, she says, the essential problems; the others, problems of finance and local government, are closely related. "Whatever else can be postponed, the need for providing satisfactory housing will call for immediate action and associated problems will inevitably be drawn along in its train. Very briefly Miss Idle outlines the problem, its size and complexity, the question of flats *versus* houses, the prospect of mass re-immigration to the cities, the rating problems. Inevitably, this is a small appendix only to the major part of the book, with its report of present and recently past conditions. *War Over West Ham* is among the best local studies yet published, serious social science humanly and "easily" presented; it is a book for the intelligent layman as much as for the expert; architects should read it because in our task of tackling this essential problem we cannot have too close understanding of the social economic and political background.

Civic Design and the Home by Arnold Whittick. No. 10 in Rebuilding Britain Series. Faber and Faber, 1943. 1s. 6d.

In the course of lecturing to the army Mr. Arnold Whittick, F.R.I.B.A., conducted a series of simple "public opinion" surveys which revealed that the British army looks forward to life after the war in small houses and not flats and that it even more emphatically rejects terraces in favour of semi-detached houses. It would seem that complete belief in the inevitable rightness of public opinion on the one issue, flats *versus* houses, must survive when we face the second problem: terrace or detached houses—the task of adjusting architectural rationalising to public sentiment, tradition and indeed public rationalising is scarcely begun.

Mr. Whittick's booklet is a valuable excursion round these and other problems in which expert and lay opinion are so frequently in conflict. His chapter headings are: *The Problem of Space*; *Functional Planning for Residential Areas*—what should be near to what—the break-up of the street; *Traditions in House Design*—with an eye constantly on the extension of "tradition" to the future; *Beauty*—including a defence of the flat roof—the respect for local colour values.

Town and Country Planning. Staples Reconstruction Digests No. 1. Staples and Staples, 1943. 2s. 0d.

This is a digest of the three fundamental planning reports by the Barlow Commission, 1939, and the Scott and Uthwatt Committees, 1942. Under each head the digest names the commission or committee members and their terms of reference, and gives the final Recommendations in full, and also the minority reports or reservations.

It is a useful handbook for any planner or public speaker, though it cannot supplant the full reports with their full statements of the evidence on which the Recommendations are based.

THE WREN SOCIETY'S PUBLICATIONS

The Committee of the Wren Society have asked us to draw the attention of Institute Members to the approaching completion of work started at the Bicentenary of Sir Christopher Wren in 1923. Of the twenty volumes of Wren drawings and other documents which the Committee designed to publish, nineteen have now been issued and the final, Volume XX, is in hand in the Press. This essential volume will contain catalogues of the Wren drawings with the plate references of those reproduced and an Index of the entire set of twenty volumes.

It is still possible to obtain complete sets at a composition subscription of £16 16s. per set. Individual volumes can be purchased at a Guinea per volume. Applications should be made to Mr. H. Duncan Hendry [F.], at 90 Fenchurch Street, E.C.3 (Tel.: Royal 6216-7.)

Review of Periodicals

1942-43—III

BUILDING TYPES (GENERALLY); PLANNING

REVISTA DE ARQUITECTURA (Buenos Ayres), 1943 Jan., pp. 21-2 & pl.:

"General classification of buildings": table and article by M. A. de la Riestra.

BUILDING, 1943 Feb., pp. 38-41:

Systems of planning (of buildings): article by J. R. Leathart [F.], illustrating the "equally balanced," "informal balanced," and "completely flexible" types.

CIVIL

BUILDER, 1943 Apr. 23, pp. 376-7:

Post-war building technique: draft reports of M.O.W. Study Committees (Directorate of Post-War Building). With charts showing organisation of M.O.W. generally, and of its code of practice production.

GOVERNMENTAL

ARCHITECT AND BUILDING NEWS, 1943 Apr. 23, pp. 63-4:

Government offices, Kildare Street, Dublin; by J. R. Boyd Barrett [A.].

AMERICAN CITY, Mar., pp. 44-5:

ARCHITECTURAL FORUM (N.Y.), 1943 Jan., pp. 36-52:

ARCHITECTURAL RECORD (N.Y.), Jan., pp. 63-70:

Government office building at Arlington, Virginia, for War Dept.: the "Pentagon Building," lay-out and outline plans, and section on heating, air conditioning and lighting equipment. (Also A.J. Mar. 25; some illus.)

ARCHITECTURAL FORUM (N.Y.), 1943 Feb., pp. 37-44:

Government office for Ministry of Education and Health, Rio de Janeiro; by L. Costa and others. Showing external sun louvers. Also illustrated in Brazil articles elsewhere.

CIVIC; MILITARY

ARCHITECTURAL REVIEW, 1943 Feb., pp. 33-6:

Municipal offices, Friern Barnet (further reference); by Sir John Brown and A. E. Henson.

ARCHITECTURAL FORUM (N.Y.), 1942 Dec., pp. 36-7:

Recruiting station, Detroit: open-planned pavilion on a city square, by C. L. T. Gabler.

ARCHITECT AND BUILDING NEWS, 1943 Feb. 5, p. 115:

Police station—air and gas-proofed—in Tottenham Court Road; by G. Mackenzie Trench [F.]. View. (Further reference.)

ARCHITECT AND BUILDING NEWS, 1943 Apr. 23, pp. 57-9:

Fire station (place unnamed), on corner site, by Lt.-Col. Percy Thomas [PP.].

COMMERCIAL

ARCHITECTURE ILLUSTRATED, 1942 Dec., pp. 147-53:

Shop planning and design: plans and fitting diagrams from A. P. Hartnell's book of that name.

ARCHITECTURAL CONCRETE (Chicago), Vol. 8, No. 4, pp. 7-13:

Shops at Pittsburg, by Nimmons, Carr & Wright, and Washington, by J. S. Redden; screen wall to roof parking ground at Washington with special concrete board-marked textures.

PENCIL POINTS, THE NEW (N.Y.), 1943 Feb., pp. 29-47: 48-71:

"Store fronts of to-morrow competition": many designs fully illustrated and analysed. Also several recent American shops.

ARCHITECTS' JOURNAL, 1943 Jan. 14, pp. 27-29, xxvi:

"Offices," by W. G. Newton & Partners [F.] (Croydon Gas Offices).

ARCHITECTURE ILLUSTRATED, 1943 Feb.:

Electricity offices and showrooms, Croydon; by Robert Atkinson and A. F. B. Anderson [FF.].

NUESTRA ARQUITECTURA (Buenos Aires), 1942 June, pp. 183-246;

REVISTA DE ARQUITECTURA (Buenos Ayres), Oct.:

Bank of the Province of Buenos Aires. Special Number describing and illustrating all aspects of the design and structure. Architects: Sanchez, Lagos and de la Torre.

ARCHITECTURAL REVIEW, 1943 Mar., pp. 65-8, xlv:

Bank in Melbourne, Australia (the English, Scottish and Australian), by Stephenson & Turner [F.]. Plans, views, and isometric diagrams of services.

JOURNAL, AMERICAN SOCIETY OF ARCHITECTURAL HISTORIANS, 1941 Apl. (recd. 1943), pp. (leaves) 16-20:

Markets: some notes, especially those of ancient Athens; paper by R. H. Howland.

TRANSPORT AND STORAGE

ARCHITECTURAL FORUM (N.Y.), 1943 Mar., p. 83:

Two small country stations for Pennsylvania Railroad, by Raymond Loewy and L. C. Tichy.

ARCHITECT AND BUILDING NEWS, 1943 Apl. 23, p. 60:

Balloon centering by Wallace Neff (already noted) applied to grain bins, Arizona.

ENGINEERING NEWS-RECORD (N.Y.), 1942 Dec. 17, pp. 65-70:

"Blimp hangars built by contrasting methods": erection of steel-truss parabolic arches with movable centering ("jumbo travelers"), and "orange-peel" doors.

ARCHITECT AND BUILDING NEWS, 1943 Mar. 12, pp. 195-6:

Hangar, Santos Dumont airport, Rio de Janeiro; by M. Roberto. Central longitudinal trusses supporting cantilevers for lateral portions. Plan, section, isometric and other views.

INDUSTRIAL

ARCHITECT AND BUILDING NEWS, 1943 Jan. 15, pp. 76-8:

Bottling plant for brewery firm at San Francisco; by W. G. Merchant, steel-framed. All-glass façade with fire-escape stair passing clear.

JOURNAL OF ROYAL ARCHITECTURAL INSTITUTE OF CANADA, 1943

March, p. 41-3:

Laboratory, bottling and packing department, Vancouver, B.C., for Coca-Cola Company of Canada, by Mathers & Haldenby, with McCarter and Nairne, consultants. Photos, no plans.

ARCHITECTURAL DESIGN AND CONSTRUCTION, 1943 Jan., pp. 17-21:

Factories on a trading estate: for manufacture of scientific glass fittings, and glass-works behind. Sir Alexander Gibb & Partners, consulting engineers; architect not stated.

CONCRETE, 1943 Apl., pp. 126-33:

Single-storey r.c. factory, "design to suit method of construction"; illustrated article, showing movable centering moved on "dollies" or rollers.

ARCHITECTURAL RECORD (N.Y.), 1943 Feb., pp. 53-66:

Mechanical equipment for factories: articles by technical specialists of Albert Kahn's firm. Heating and ventilating; atmospheric control; boiler plants; electrical distribution; plumbing and sanitation; industrial piping. Also kitchens and cafeterias; medical departments.

ARCHITECTURAL FORUM (N.Y.), 1942 Dec. pp. 61-92:

Small arms ammunition plants: organisation, planning, procedure, progress photos, and examples. Control, administration, factory, explosives, ballistics (testing), storage, power, and service buildings.

ARCHITECTURAL FORUM (N.Y.), 1942 Nov., pp. 52-8:

War material plant in U.S., place unstated—N. N. Culin, designer; administration and factory blocks.

ENGINEERING NEWS-RECORD (N.Y.), 1943 Feb. 25, pp. 48-51:

"War plant with glass walls," for maximum daylight and constant heat and humidity, in an eastern city (unstated): progress views and exterior.

WELFARE: HOSPITALS, &c.

BUILDER, 1943 Mar. 26, pp. 285-6:

Medical centre and welfare and labour block for a motor works by J. W. Pringle.

CALIFORNIAN ARTS AND ARCHITECTURE, 1942 Sept., p. 26:

Small medical building by J. R. Davidson. Surgeries, consultation rooms, etc., for two doctors; plans, photos.

ARCHITECTURAL DESIGN AND CONSTRUCTION, 1943 Apl., pp. 81-6:

Hospitals: post-war planning. Article by Lionel Pearson [F.]. Local h.; key h.

BUILDER, 1943 Jan. 15, pp. 62-7:

Hospital in England for Canadian Red Cross; by Robert Atkinson & A. F. B. Anderson [FF.]. Lay-out plan; administration, clinical, and ward blocks illustrated. (Further reference.)

ARCHITECTURE ILLUSTRATED, 1943 Mar., pp. 26-31:

War emergency hospital, by A. W. Kenyon [F.] (further reference): lay-out plan, views of lodges and nurses' and administration wings.

PENCIL POINTS, 1942 Nov., pp. 42-45:

Hospital (Sisters of Charity) addition, Buffalo, N.Y., by G. D. Dietel: long single-storey ranges with utility services, clerestory-lit, between wards.

REVISTA DE ARQUITECTURA (Buenos Aires), 1943 Feb., p. 61:

Illustrations and brief descriptions of several Argentine hospitals and asylums, including regional children's asylum of Buenos Aires. Tuberculosis Hospital, Villaguay.

SOUTH AFRICAN ARCHITECTURAL RECORD (Johannesburg), 1943 Jan.:

Dental hospital and school for the University of the Witwatersrand, Johannesburg; by N. T. Cowin & G. E. Pearce, with John Fassler.

ARCHITECTURAL DESIGN AND CONSTRUCTION, 1943 Mar., pp. 59-69:

Health centres after the war: by Lionel Pearson [F.]. Illustrating the Finsbury example: a "family" h.c. design; Eastman Clinic, Stockholm; and the Edgar Allen physical treatment centre for the Royal Sheffield Infirmary and Hospital.

REVISTA DE ARQUITECTURA (Buenos Ayres), 1942 Dec., pp. 525-31:

Medical centre ("Policlinico") of the Society of Medicos, San Martín—

plans, views; "Hospital of Charity," Rosario; both by T. & J. Micheletti.

ARCHITECTURAL FORUM (N.Y.), 1942 Nov., pp. 59-63 : Blood transfusion centres ("blood banks") at San Francisco and Honolulu; G. A. Dailey and C. W. Dickey associates, architects respectively.

HOSPITAL AND NURSING HOME MANAGEMENT, 1943 Feb., pp. 133-6 : Operating theatre suite, Walsall General Hospital; by Jeffries and Shipley [A.]. Plan, view and equipment.

IRISH BUILDER, 1943 Apr. 10, pp. 141-2 :

Mental hospital at Monaghan; by C. T. McLynn.

ARCHITECTURAL FORUM (N.Y.), 1942 Nov., pp. 37-38 : Country home for film industry beneficiaries, San Fernando, Calif.: free treatment of community blocks, including convalescent building, and paired guest units or cottages around pools; W. L. Pereira's offices, architects.

EDUCATION, 1943 Apr. 30, pp. 405-6 :

War-time nurseries, hatted, at Newport, Mon.: by C. F. Ward [F.], borough architect. 2 views.

RESTAURANTS, PUBLIC HOUSES

JOURNAL, INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS, 1943 Feb. 2, pp. 278-86 :

"British restaurants": paper, chiefly dealing with Sutton and Cheam (Surrey), by H. Thorneley [A.], chief architectural assistant. With 4 plans.

BUILDER, 1943 Feb. 26, p. 196 :

Public house at Bromley (in High Street), the "Greyhound": by R. G. Muir [F.].

BUILDER, 1943 Mar. 12, p. 240 :

Inn (The Peartree) in a new development of Welwyn Garden City; by R. G. Muir [F.].

RECREATIVE; COMMUNITY

ARCHITECTURAL RECORD (N.Y.), 1943 Feb., pp. 83-4 :

Motion picture projection booths: time-saver standards.

BUILDER, 1943 Mar. 12, pp. 241-2 :

Service club for the Forces in a south of England town: by the Ministry of Works (Maintenance Division) for the American Red Cross. Lounges (one with stage) with canteen over; huts for residential staff.

ARCHITECTURAL FORUM, 1943 Mar., pp. 55-60 :

Welfare Building, Naval Training Station, Great Lakes, Ill., by Skidmore, Owings & Merrill, adjacent to previously erected recreation building (ARCHITECTURAL FORUM, 1942 Aug.). Lounge, writing-room, etc. Unusual timber structure, 60-ft. single-span roof, non-structural curtain walls.

EXHIBITIONS; TEMPORARY BUILDINGS; BRIDGES; CITY WALLS

ARCHITECTURAL FORUM (N.Y.), 1943 Feb., pp. 49-55; 56-7 :

"New display techniques": diagrams of framed movable screen and other fittings. Also studio and exhibition space for group of artists.

ARCHITECTS' JOURNAL, 1943 Apr. 29, pp. 286-7 :

Transportable timber hut, of collapsible trusses, adapted for sheet material (type A) or flexible materials (type B); designed by H. Dalton Clifford. Isometrics, view of model, and diagrams of packing for transport.

CONCRETE, 1943 Jan., pp. 17-26; Feb., pp. 55-63, 39-40 :

Railway bridges in N.Z., reinforced concrete: article from COMMONWEALTH ENGINEER, by W. L. Newnham, illustrated. (Feb.) *In situ* concrete decoration; including buildings in U.K. and U.S.

ARCHITECTURAL REVIEW, 1943 Mar., pp. 81-2 :

Fortifications of Berwick-upon-Tweed: article by L. P. Hall on sixteenth-century invasion precautions.

RELIGIOUS

LITURGICAL ARTS (Concord, U.S.), 1943 Feb., pp. 25-6 and pls. :

Twin chapels (Catholic and Protestant), joined by loggia with offices and common hall, for U.S. Naval Air Base, Jacksonville, Florida; plan, and illustrations of Catholic Chapel; R. W. Olson, of Robert & Company, architect.

BUILDER, 1943 Apr. 16, pp. 345-6 :

The future of church building in relation to air-raid damage and destruction; short article by N. F. Cachemaille-Day [F.].

SCHOOLS

PENCIL POINTS, 1942 Nov., pp. 46-60 :

Schools: numerous U.S. examples, with ideal lay-out and classroom designs; one school has community centres. Article by Dr. N. L. Engelhardt.

ARCHITECTURAL RECORD (N.Y.), 1943 Feb., pp. 71-82 :

"New schools after the war": by N. L. Engelhardt. Illustrating a community high school, New York (The Benjamin Franklin); boys'

junior high school, N.Y.; trade school in Berne, Switzerland; and a small vocational school (workshop and music-school) at Holland, Michigan.

EDUCATION, 1943 Feb. 26, pp. 189-90, and subsequent issue :

School buildings of the future, by S. H. Loweth [F.] (Kent County architect). No. 1 illustrates a proposed junior and infants' school, Dartford Heath.

BUILDER, 1943 Mar. 19, pp. 259-61 :

School buildings after the war: talk by C. G. Stillman [F.], county architect for West Sussex. View of open-air example and 2 hypothetical lay-outs.

ARCHITECTS' JOURNAL, 1943 May 6, pp. 303-4 :

School (elementary) at Rowley Regis for 50 babies, 150 infants, 150 juniors, by J. Blackburn.

BUILDER, 1943 Jan. 29, pp. 110-2 :

Elem. school (junr. and infant), Gaere state, Newport, Mon.: C. F. Ward [F.], borough architect. (Further reference.)

CALIFORNIA ARTS AND ARCHITECTURE, 1942 Nov., pp. 34-5 :

Nursery school for 30 children: plan, notes and daily cycle. By Josef Van der Kar.

SOUTH AFRICAN ARCHITECTURAL RECORD, 1943 Mar., pp. 47-50 :

Afrikaans primary school, Langlaate North, Johannesburg, by H. H. Le Loith [A.], for Transvaal Provincial Administration. Classroom wing with ten classrooms for boys and girls, including kindergarten, assembly hall (not yet built) and staff block.

ARCHITECTS' JOURNAL, 1943 Feb. 11, pp. 109-11 :

Senior boys' school, Littlehampton, extensions; by C. G. Stillman.

LABORATORIES

NUESTRA ARQUITECTURA (Buenos Ayres), 1942 Nov., pp. 392-407 :

REVISTA DE ARQUITECTURA (Buenos Aires), 1943 Feb., p. 69 :

Laboratory for the Y.P.F. technical department, Florencio Varela.

LIBRARIES; BROADCASTING STUDIOS; SOCIETIES' BUILDINGS

BUILDER, 1943 Apr. 30, pp. 389-93 :

Library for New College, Oxford, by Hubert Worthington [F.]—further reference.

ARCHITECTURAL CONCRETE (Chicago), Vol. 8, No. 4, pp. 1-6 :

ARCHITECTURAL RECORD (N.Y.), 1942 Nov., pp. 37-40 :

HEATING AND VENTILATING (N.Y.), Nov., pp. 21-5 :

Radio City, San Francisco, for National Broadcasting Company: Albert F. Roller, architect. (A.C.) plans, constructional details, views. (H. & V.) air-conditioning system. Views of building and installation, article by S. E. Locke.

CALIFORNIA ARTS AND ARCHITECTURE, 1942 Sept., pp. 30-1 :

American Red Cross H.Q. building, Los Angeles, by S. Spaulding; offices, auditorium for 400.

DOMESTIC (general, including PLANNING)

ARCHITECT AND BUILDING NEWS, 1943 April 30, p. 80 :

Two-bedroomed "utility house," by Frances Barker [A.], intended for older people.

PARTHENON, 1943 Mar., pp. 80-1 :

"Things they order better elsewhere": Continental house construction practices advocated; article, with small sketches, by Bernard Engel. Flooring, insulation, walls, stair winders, windows, heating.

JOURNAL, ROYAL SANITARY INSTITUTE, 1943 Apr., pp. 51-74 :

Healthy housing: special section, including presidential address, three papers (one by Rees Phillips [F.]), and memorandum to the Central Housing Advisory Committee's Sub-Committee on the Design of Dwellings: supplementary memorandum on sewage disposal from rural dwellings.

PENCIL POINTS (New York), 1942 Sept., pp. 59-60 :

Houses and housing: minimum ceiling heights and window areas; data sheets.

ARCHITECTURAL RECORD (N.Y.), 1942 Nov., pp. 57-64 :

"Freedom and space in small house planning": with plans of individual rooms and groupings for uses; including combined living and dining rooms, and alternative uses for small rooms.

ARCHITECT AND BUILDING NEWS, 1943 Feb. 5, pp. 120-1 :

"Good houses with all modern amenities": unit-sheets from the "Living in the Country" Housing Centre exhibition (see separate entry), by Miss Owen. Plan, compared with the R.I.B.A. "any aspect" plan (from memorandum to C.H.A.C.), and note by E.G.

BUILDER, 1943 Feb. 5, p. 131 :

"Planning homes for convenience": plan and letter by W. R. Andrews, inspired by war-damage survey of slum property. And corresp., Mar. 19, &c.

ARCHITECT AND BUILDING NEWS, 1943 Mar. 5, p. 185 :

Small house design: further corresp.—letter, by Howard Robertson [F.], with "plan of 'utility house No. 5'."

CALIFORNIA ARTS AND ARCHITECTURE (San Francisco), 1942 Dec., pp. 28-9:

"Pluminum house": model of a type with basic floor slab of unit-spaced "receptacles" for roof supports and solid or glass partitions, showing adaptable and expandable room units, with mechanical service unit in middle.

HOUSING

ARCHITECT AND BUILDING NEWS, 1943 Mar. 12, pp. 190-1;

ARCHITECTS' JOURNAL, Mar. 18, p. 193;

BUILDER, Mar. 19, p. 266;

HOUSING AND PLANNING NEWS-BULLETIN, Apl.:

Housing: speech by the Minister of Health (Ernest Brown) to the N.H. & T.P.C. Summary.

ARCHITECTURAL DESIGN AND CONSTRUCTION, 1943 Jan., pp. 5-16, and subsequent consecutive issues:

"Housing forum." No. 1: 20 years of housing, (1) under local authorities (including Tudor-Walters report, M. of H. Type plans and elevns., and 1919 Acts); also War-time housing, permanent type construction (entered separately).

Housing forum, instalment 2:—20 years of housing progress, under local authorities, pt. ii: 1923 and -24 Acts and type plans. Unit-built houses, Kilmarnock (entered separately). "The New House 194 X," from ARCHITECTURAL FORUM, Sept., reviewed. Co-operative housing in Sweden, by C. A. Hellstrand.

Housing forum, 3: number on rural housing. Articles by Edric Neel [A.] and J. Blanco-White [A.] and by B. S. Townroe [Hon.A.]; Ministry of Health emergency agricultural programme; local authority housing, iii; cottage flats in Wales, by James Forrester.

Housing forum, 4: 20 years of progress, under local authorities, iv: slum clearance, type plans, examples. Housing for agricultural workers: M.O.W. type designs and Scottish model designs (entered separately); housing and the R.I.B.A. ("Rebuilding Britain") exhibition.

JOURNAL, CHARTERED SURVEYORS' INSTITUTION—SCOTTISH SUPPLT., 1943 Apl., pp. 54-9:

Memorandum of housing design by the Scottish branch to the Scottish Housing Advisory Committee's Sub-Committee on that subject.

ARCHITECT AND BUILDING NEWS, 1943 Jan. 22, pp. 87-91;

ARCHITECTS' JOURNAL, Jan. 28, pp. 75-8, 73;

ARCHITECTURAL DESIGN AND CONSTRUCTION, Feb., pp. 30-3;

BUILDER, Jan. 22, pp. 84-8;

BUILDING, Feb., pp. 44-5;

ILLUSTRATED CARPENTER AND BUILDER, Feb. 5;

OFFICIAL ARCHITECT, Feb.:

Housing (single-storey) in Ayrshire (Waterside, Kilmarnock), "unit-built" (prefabricated)—r.c. frame and Gypklith (wood-cement) panels; a pair. By Sam Buntun [L.]. (A.J.): Also comment, with defn. of "prefabrication." (Bg.) with constructional isometric.

COUNTRY LIFE, 1943 Jan. 22, pp. 170-2:

Additions to Cheshire villages (Willaston for one), by A. W. Kenyon [F.], for the Ministry of Supply: views, and short article by C. Hussey.

BUILDER, 1943 Mar. 5, pp. 218-23:

Housing for Ministry of Supply in north of England, two schemes in Cheshire, one in Lancs.: by A. W. Kenyon [F.],—further reference.

ARCHITECTS' JOURNAL, 1943 Apl. 15, pp. 253-5:

War housing, by A. W. Kenyon [F.], continued: further scheme, also for married workers.

ARCHITECT AND BUILDING NEWS, 1943 Apl. 30, p. 68:

War-time housing: the art of siting, short article illustrated by war housing scheme by A. W. Kenyon [F.].

SOUTH AFRICAN ARCHITECTURAL RECORD (Johannesburg), 1943 Feb.:

Housing in the Transvaal in native materials: "the problem of the location," illustrated article on ten "locations" (schemes), by Betty Spence. With chart of varying conditions obtaining.

MASTER BUILDER, 1943 Feb., pp. 742-3:

Prefabricated housing (in Canada): extracts from article in ENGINEERING AND CONTRACT RECORD OF CANADA.

PENCIL POINTS, 1942 Nov., pp. 28-41:

"Peace can gain from war's forced changes": article by Richard J. Neutra, illustrating his housing lay-outs of Avion Village, Texas; Parkliving, Jacksonville, Florida; Amity Village, Compton, Calif.; and Channel Heights, San Pedro, Calif. Also housing community building at Pueblo del Rio, and youth training centres at Sacramento and San Luis Obispo, Calif.

ARCHITECTURAL FORUM (New York), 1943 Jan., pp. 74-80:

Housing project at Bellmawr, N.J.; by Mayer & Whitlesey with J. N. Hettel. Lay-out, plans and views; also community buildings, including nursery.

CALIFORNIAN ARTS AND ARCHITECTURE, 1942 Sept., pp. 38-9, 41:

Victory Park housing project for City of Compton, by A. Wilson

and T. Criley, for National Housing Agency. Houses for 500 families in 174 buildings of four types, 3-, 4- and 5-room apartments. Wood frame.

ENGINEERING NEWS-RECORD (N.Y.), 1943 Feb. 18, pp. 6-7:

"Six-room home in six hours' time": demountable house project at Liberty Hills, near Charleston: progress photos and short article.

CALIFORNIA ARTS AND ARCHITECTURE, 1942 Nov., pp. 40-1; 42-4:

War housing project in San Pedro area, showing change from single-family to large dormitory units; Lewis E. Wilson, architect. Views only. Also project at San Pedro for Los Angeles City Housing Authority, in grouped one- or two-room units, prefabd.; Geo. Allen and W. G. Lutz, architects.

CALIFORNIA ARTS AND ARCHITECTURE (San Francisco), 1942 Dec., p. 22:

Housing project, Vallejo, Calif.—"War housing case history"; views of prefabricated "Homasote" housing. Architect, W. W. Wurster.

ARCHITECTURAL RECORD (N.Y.), 1943 Feb., pp. 49-52:

The trailer house: T.V.A. types, by its Department of Regional Studies.

ARCHITECTURAL DESIGN AND CONSTRUCTION, 1943 Jan.;

OFFICIAL ARCHITECT, Jan.:

War-time housing, permanent type construction.

BUILDER, 1943 Apl. 23, pp. 369-72:

Rural cottages: their design and construction; article by Edgar Ranger [F.], with type plans.

ARCHITECT AND BUILDING NEWS, 1943 Mar. 26, pp. 222-3;

ARCHITECTS' JOURNAL, Apl. 8, p. 235;

ARCHITECTURAL DESIGN AND CONSTRUCTION, Apl., pp. 77-8;

BUILDER, Mar. 26, pp. 282-4:

Rural houses or cottages for Scotland, designs prepared by the Dept. of Health and approved by the Scottish Housing Advisory Committee. Type plans and views. Also debate in Lords and extract from statement by A.B.T. on agricultural housing. (A.D. & C.): criticism by Edric Neel [A.].

ARCHITECT AND BUILDING NEWS, 1943 Feb. 12, pp. 128-32;

ARCHITECTS' JOURNAL, Feb. 25, p. 139;

BUILDER, Feb. 12, pp. 154-5:

Cottages for agricultural workers: type plans for 3,000 to be built by the Ministry of Health, accompanied by programme of numbers intended for various counties. (A. & B.N.): note by Edwin Gunn [A.].

ARCHITECT AND BUILDING NEWS, 1943 Mar. 5, pp. 179-184:

"Building those agricultural cottages": article by Edwin Gunn [A.].

ARCHITECT AND BUILDING NEWS, 1943 Mar. 18, pp. 203-6; Mar. 26;

ARCHITECTS' JOURNAL, Mar. 25;

ARCHITECTURAL DESIGN AND CONSTRUCTION, Apl., pp. 75-6, 65;

BUILDER, Mar. 19, pp. 263-6;

BUILDING, Apl., pp. 96-7;

COUNTRY LIFE, Mar. 26, p. 569;

ILLUSTRATED CARPENTER AND BUILDER, Apl. 16, pp. 417-8;

NATIONAL BUILDER, Apl., p. 125;

OFFICIAL ARCHITECT, Apl., pp. 164-5:

Ministry of Health's agricultural workers' housing project: (Br.) further plans, type perspectives, and constructional details, by Ministry of Works. (A. & B.N.): Perspectives, constructional details, and article, "Those agricultural cottages again," by E. G. (A.J.): Plans, perspectives, and details.

COUNTRY LIFE, 1943 Apl., pp. 658-9:

The English low-cost house: short article by G. A. Jellicoe [F.], apropos of the Government's agricultural workers' cottage designs; with illustrations, including two type plans.

IRISH BUILDER, 1943 Jan. 16, p. 29:

Post-war housing: speech to joinery manufacturers by A. C. Bossom [F.]. From SURVEYOR. Prefabrication; timber and plastics; future control of building.

BUILDER, 1943 Apl. 23, pp. 375-6:

Housing and planning: the Labour Party's post-war policy ("Housing and town planning after the War"). Extracts.

ARCHITECTURAL RECORD (New York), 1943 Jan., pp. 57-62:

"The art in housing": discursive article by Joseph Hudnut on aesthetic aspect; with diagrammatic sketches.

FLATS

ARCHITECT AND BUILDING NEWS, 1943 Jan. 22, pp. 95-6:

Design for block of three-roomed flats, open passage ways on alternate floors and adjustable as 2- or 4-roomed in intermediate ones; sketch by Capt. M. C. M. Athorpe, prisoner of war.

ARCHITECTURAL REVIEW, 1943 Feb., pp. 37-9:

Flats for Hackney borough council in Warwick Grove and Springfield, Clapton (1938-40). Laundry and clubroom blocks in courtyards forming children's playground and games courts.

BUILDING, 1943 Feb., pp. 32-6:
 "Balcony flats": parallel blocks with nearly detached longitudinal and transverse balconies between, to avoid shadows on façades. By Walter Segal.

TOWN (including TERRACE) HOUSES

BUILDING, 1943 Apr., pp. 84-7:
 Terrace houses: article, showing existing and proposed types of lay-out and access to rear, by Walter Segal.

CLUBS

BUILDER, 1943 Feb. 19, pp. 174-7;
 BUILDING, Mar., pp. 64-6:
 Y.M.C.A. King George's Club for Officers—adaptation of Hotel Splendide—Piccadilly; Oliver Hill [F.], architect.

ARCHITECT AND BUILDING NEWS, 1943 Jan. 29, pp. 106-9:
 Automobile club, the Argentina, at Buenos Ayres: by Vilan, Bunge & Gimenez-Falomir. Rectangular office and restaurant block with semicircular garage and workshop projection.

HOTELS, HOSTELS, INNS OF COURT

ARCHITECT AND BUILDING NEWS, 1943 Apr. 9, p. 29:
 Hotel for women government employees in Washington, the Meridian Hill; by Louis Justement.

ARCHITECTURAL FORUM (New York), 1943 Jan., pp. 65-70:
 "British hostels" for unmarried war-workers. Illustrations.

BUILDING, 1943 Mar., pp. 70-4:
 "A war workers' hostel": 1,000-person example by Ministry of Works for National Hostels Corporation. Views, outline plan of welfare block, plan and isometric of cubicles, constructional diagram of assembly hall. Architect unstated.

ARCHITECT AND BUILDING NEWS, 1943 Apr. 30, pp. 73-7:
 Hostel for war industry workers in N. Wales, by Wood, Goldstraw and Yorath, based on standard Ministry of Works plans. Accommodation for 500 women, with recreation building, canteen, laundry, sick bay. Structure B.C.F. precast concrete, with brick-built ablution blocks.

ARCHITECT AND BUILDING NEWS, 1943 May 7, pp. 85-6;
 BUILDER, 1943 May 7, p. 410 —;
 COUNTRY LIFE, 1943 May 14, p. 479:

Gray's Inn rebuilding, projects by Edward Maufe [F.].

AGRICULTURAL

ARCHITECT AND BUILDING NEWS, 1943 Apr. 16, pp. 47-8:
 Small-holdings in Middlesex: several estates by A. Ewart Aston [L.]. Article by Edwin Gunn [F.].

PENCIL POINTS (New York), 1942 Dec.:
 Farm and rural number. "Yesterday, today, and tomorrow": changes in farm life. "After shelter comes health": Farm Security Administration's rural health programme in California. "Farm buildings are architecture," by Talbot F. Hamlin. Architecture in rural areas (T.V.A.). Also arts. on chemistry and architectural aid, and on electricity, in farming.

ARCHITECTS' JOURNAL, 1943 Apr. 1, pp. 220-1:
 Planning of farm buildings: article by Douglas Seligman; including cowsheds, calf rearing, grain storage and cattle food mixing, implement sheds, workshop, and farm office.

BUILDER, 1943 Apr. 16, pp. 351-2;
 JOURNAL R.I.B.A., Mar., pp. 111-2:
 Farm buildings after the war: memorandum by William Keay [F.] and H. Duncan Hendry [F.], for the R.I.B.A., to the Ministry of Agriculture's Farm Buildings Committee. Short bibliog.

ARCHITECT AND BUILDING NEWS, 1943 May 7, pp. 89-90:
 Agricultural buildings: must they be permanent? Article by E. Gunn [A.] describing an experimental timber yard shed with green timber laminated truss designed by Peter Berner [A.].

COUNTRY AND SMALL HOUSES

ARCHITECTURAL FORUM (N.Y.), 1943 Mar., pp. 61-70:
 Houses, Chappaqua, N.Y., by J. D. Weiss; for J. B. Nesbitt (in California), by Neutra.

ARCHITECTS' JOURNAL, 1943 Feb. 18, pp. 123-8:
 Story of a house at Coudsdon municipally banned as a "disfigurement," Edward Banks, architect; and illustrated description of house. Article ("Before the War") by P. C. Manuel.

ARCHITECTURAL ASSOCIATION JOURNAL, 1943 Jan., pp. 54-6, 57;
 BUILDER, Feb. 26, pp. 197-9:
 Small house at Sonning, by the Architects' Co-operative Partnership (11 young architects); plans, views, and note by L. Manasseh.

DOMESTIC DEPENDENCIES

ARCHITECTURE ILLUSTRATED, 1942 Dec., pp. 142-5;
 BUILDER, 1943 Feb. 12, pp. 152-4;
 PARTHENON, Mar.:
 Canteen at Dudley (Woodside Works); by L. J. Multon. Including plan and elevation.

ARCHITECT AND BUILDING NEWS, 1943 Apr. 9, pp. 20-21, and pl. opp.;
 BUILDER, Apr. 9, pp. 330-1:
 Kitchen planning: post-war design proposal, by Birmingham Public Works Department and others. Article, by H. J. Manzoni; plan, sections, and view.

ARCHITECTURAL FORUM (N.Y.), 1943 Mar., p. 34:
 Prefabricated plywood bathroom unit, designed by W. V. Reed for National Housing Agency.

DETAILS, FITTINGS

ARCHITECTURAL RECORD (N.Y.), 1942 Nov., pp. 69-72:
 "Louvers" for houses—louvre-boards for walls and dormers, brick, tile and metal vents, masonry grilles, and door or porch jalousies: time-saver standards.

ARCHITECTURE (general), including EDUCATION

ARCHITECTS' JOURNAL, 1943 Jan. 28, pp. 79-82, and subsequent issues:
 "Tabloid technics": new series of abridged reports of papers or events, classified under subject headings, and followed by the usual Information Centre questions and answers.

JOURNAL OF EDUCATION, 1943 Jan., pp. 16, 18, 20, 22:

"Architecture in education": article by Edward Carter [A.].

JOURNAL, AMERICAN SOCIETY OF ARCHITECTURAL HISTORIANS, 1942 July:

Architectural education in 19th-century Germany; article by Paul Zucker.

JOURNAL, AMERICAN SOCIETY OF ARCHITECTURAL HISTORIANS (Troy, N.Y.), 1941 Apr. (recl. 1943):

The Ecole des Beaux-Arts and architectural education: article by Paul P. Cret.

SOUTH AFRICAN ARCHITECTURAL RECORD, 1943 Mar., pp. 51-62:
 Architecture in relation to science and industry. Presidential Address by Prof. G. E. Pearce [A.] to Association of Scientific and Technical Societies of South Africa. A statement of the architect's functions and responsibilities in industry and highly specialised designing. Architect and engineer problem discussed. Illustrated.

PENCIL POINTS, THE NEW (N.Y.), 1943 Feb., pp. 72-77:

"Four viewpoints on architecture and planning": The architect, co-ordinator, by A. C. Holden; Planning: urns or urbanism, by Serge Chermayeff; Public works as a reservoir? by the F.W.A. Administrator; and a speech in America on British reconstruction plans, by Sir Ernest Simon.

BUILDER, 1943 Apr. 9, p. 329:
 "Architecture and planning": lecture at the National Gallery, in connection with "Rebuilding Britain" exhibition, by W. H. Ansell [P.].

PRESERVATION

ARCHITECTS' JOURNAL, 1943 Apr. 15, pp. 249, 251:
 Abingdon Street, Westminster: threat of demolition and plea for preservation; illustrations.

JOURNAL, AMERICAN SOCIETY OF ARCHITECTURAL HISTORIANS (Troy, U.S.), 1941 July-Oct.:

Preservation of historic monuments: special issue. With articles on various American movements.

(To be continued)

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 Encyclopædia of war damage and compensation.

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Recording ruin. Drawings by H. Russell Hall. [Experiences in reporting bomb-damaged houses, London.]

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Destruction of architectural monuments by German invaders. Also Snegirev (V), "Monastery of Resurrection" [Istra]. (From V.O.K.S. Bulletin [U.S.S.R. Socy. for Cultural Relations with Foreign Countries], 1942, Nos. 3/4.)

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The War Damage (Amendment) Act, 1942. (Supplementary to the Law and practice of war damage compensation.) A memorandum. (Auctioneers' and Estate Agents' Institute of the United Kingdom, Jnl., Jan., Suppt. No. 1.) 8½". Knole. 1943. R.
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War-time guides to British sources of specialised information :
No. 4. Scientific and technical periodicals received from the U.S.S.R. Compiled at the request of the British Council &c. dupl. typescript. 13". 1942. 2s. 6d. to non-members. R.
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London triumphant. 9½". 276 pp. ('278'—2), incl. pls. Lond. : Studio. [1941.] 15s. R.
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- ROTARY CLUB OF STOURBRIDGE, Worc. : RECONSTRUCTION COMMITTEE
Report . . . Oct. 1941—Aug. 1942. pam. 8½". n.p. [1942.]
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Post-war reconstruction, cover title. (Thesis for Final Examination, Dec.) typescript, D., & Repr. 12½". [1942.]
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- PLANNING AND RECONSTRUCTION YEAR BOOK
—, F. J. Osborn, advisory ed. 1942. [Incl. articles by various aus.] 8½". 297 pp. Lond. : Todd Pubg. Co. [1942.] (£1 1s.) P.
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Rebuilding Britain. (Published . . . on the occasion of the exhibition at the National Gallery, London, R— B—, organised by the R.I.B.A. and sponsored by the building industry.) 9½" × 7½". 80 pp. Lond. : Lund Humphries, for R.I.B.A. [1943.]
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From plan to reality.—A report of four years' progress on the regional development of New York and its environs. &c. 3 vols. 11" × 8½". New York. [1933], 1938, 1942.
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- NEWBOLD (H. BRYANT), ed.
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The Planning of our city. (Cardiff).—Report of public lecture in "Aspects of citizenship" series . . . 1942.) pam. 8½" n.p. [? 1942 or -43.] 3d. R.
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Pubns. : No. 4238. (Oct. 8.) The City, the housing and the community plan : some basic and historical considerations. By Hugo Leipziger. (Bureau of Municipal Research : M— studies, No. 19. B— of Engineering Research : E— r— series, No. 34.) pam. 10". Austin. 1942.
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MEMBERS SERVING WITH THE FORCES

THIRTY-FOURTH LIST

UNITS AND RANKS OF SERVING MEMBERS

- KILLED**
RATHMELL, MILES [A.], Officer Cadet R.A.
SHERWIN, R. W. [A.], Sgt./Ods. R.A.F.
- MISSING**
NEWTON, A. T. [S.], Sgmn. R.C.S.
THOMAS, B. W. R. [A.], Lieut. R.N.V.R.
- PRISONER OF WAR**
SILCOCK, RAYMOND [S.], L.A.C. R.A.F.
- DISTINCTION**
CARTWRIGHT, T. N. [F.], Lt.-Commander R.N.V.R.
Awarded the Distinguished Service Cross.
- ALTHAM, C. J. [S.], 2nd Lieut. R.E.
ANDREWS, D. G. [S.], Cpl. R.E.
ANNS, KENNETH [L.], Major R.E.
ATKINSON, G. A. [S.], Flying Officer R.A.F.
BARNES, R. S. [S.], 2nd Lieut. R.A.
BAXTER, A. J. [A.], Lieut. R.E.
BEARD, PHILIP [S.], Petty Officer Writer R.N.V.R.
BEASLEY, M. D. [S.], Capt. Indian Army.

- BEECROFT, C. I. [A.], 2nd Lieut. R.E.
BOWLER, F. C. [S.], Pilot Officer R.A.F.
BRADLEY, STANLEY [S.], L/Cpl. Camouflage Branch.
BRANSFORD, C. A. [A.], Pte. P.T.C.
CAHN, LESLIE G. [A.], Lieut. Royal Australian Engineers.
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COOPER, S. E. [A.], 2nd Lieut. R.E.
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 CUMMING, G. S. [S.], Tpr. R.A.C.
 CUNNINGHAM, W. O. [S.], Lieut. R.A.
 DAVIES, W. F. [A.], Capt. R.E.
 DEAN, R. A. [A.], 2nd Lieut. R.E.
 DE METZ, MORRIS [F.], Major R.E.
 DUNFORD, F. W. [A.], L.A.C. R.A.F.
 DYER, HERBERT [L.], Lieut. R.E.
 ELLIS, T. B. H. [A.], Capt. R.E.
 FELL, IAN B. [A.], Flight Lieut. R.A.A.F.
 FERMAUD, L. H. A. [A.], Lieut. R.E.
 FINLAYSON, W. E. [S.], Lieut. General List.
 FLOYD, J. P. [A.], L/Sgt. R.E.
 FORBES, H. T. [F.], Sub-Lieut. R.A.N.V.R.
 FORD, W. A. [L.], Capt. R.E.
 FOWLER, R. KEITH [S.], Lieut. R.A.
 GASKELL, E. [A.], 2nd Lieut. R.E.
 GEDDES, C. W. [L.], Lieut. R.E.
 GEDRYCH, T. D. [A.], Lieut. R.E.
 GIBBERD, H. [A.], Sgt. R.A.F.
 GLADSTONE, DAVID S. [A.], Squadron Leader R.A.F.V.R.
 GOLDSTRAW, G. A. [A.], Capt. Indian Engineers.
 GOMERSALL, ERIC [S.], Lieut. General List.
 GOODBODY, H. N. [S.], Lieut. Indian Army.
 GOODMAN, C. J. [L.], Lieut. R.E.
 GOORNEY, J. [S.], S/Sgt. R.E.
 GREENING, C. J. [A.], Capt. R.E.
 HALL, VICTOR [A.], A.C.1 R.A.F.
 HAMILTON, GRO. M. [S.], Spr. R.E.
 HARRIS, L. R. [S.], 2nd Lieut. R.E.
 HICKS, T. C. G. [A.], Lieut. Engineers' Section A.I.F.
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 HOUGHTON, J. [S.], S/Sgt. R.E.
 HOWITT, L. C. [F.], Capt. General List.
 HUGHES, A. [S.], Sgt. R.A.F.
 JACKSON, GORDON W. [F.], Capt. R.E.
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 KELLETT, K. G. [A.], 2nd Lieut. R.E.
 KERRISON, W. J. E. [S.], Flying Officer R.A.A.F.
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 KINGSFORD, G. M. [A.], Squadron Leader R.A.F.V.R.
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 WAKEFIELD, PETER L. H. [A.], 2nd Lieut. R.E.
 WALMSLEY, W. G. [A.], Capt. R.E.
 WARMAN, K. [A.], L.A.C. R.A.F.
 WATSON, ALEX [A.], Sgt. R.A.F.V.R.
 WATT, J. D. [A.], Major Royal Canadian Engineers.
 WESTMORELAND, C. E. [A.], Major R.A.S.C.
 WHITING, BASIL T. [A.], Capt. R.E.
 WHYMAN, G. P. [A.], Lieut. R.E.
 WIGHTMAN, K. L. [A.], 2nd Lieut. R.E.
 WRIGHT, R. H. [S.], L/Cpl. R.E.
 YEATS, G. R. [S.], O/Cadet R.E.
 YOUNG, F. W. [S.], P/O R.A.F.
 YOUNG, R. R. [A.], Capt. R.E.
 INVALIDED FROM THE R.A.F.
 RUSHTON, R. F. [A.], A.C.2 R.A.F.

MEMBERSHIP LISTS

ELECTION : MAY, 1943

The following candidates for membership were elected in May 1943.

AS FELLOWS (3)

COATES : UDOLPHUS AYLMER [A. 1933], Lahore, India.
 CUBITT : HORACE WILLIAM, F.S.I. [A. 1904].
 DOCTOR : BHICAJI EDULJI [A. 1934], Bombay, India.

AS ASSOCIATES (6)

COMPTON : DOUGLAS KEITH, Stourbridge.
 GRIFFITHS : GEOFFREY BARNETT, Birmingham.
 MALICK : SUSHIL, B.Sc., Glasgow.
 MOLLOY : BRENDAN, B.Arch., Athlone.
 O'REILLY : BRENDAN, B.Arch., Dublin.
 WOOD : ALLAN HAIGH, Burnley.

AS LICENTIATES (14)

DUBERY : HERBERT.
 HENDERSON : JAMES, Edinburgh.
 McNEILL : JOHN, Sandbank, Argyllshire.
 MOORHOUSE : ARTHUR HENRY, Huddersfield.
 MORGAN : ERNEST JAMES, South Shields.
 NICHOLLS : LT.-COL. GUY HERBERT, Reading.
 RANDALL : CYRIL GEORGE.
 SHAPLEY : ARTHUR FRANK, Ardrossan.
 SMITH : KENNETH.
 STORRY-MOORE : ALBERT VICTOR THEODORE, Ipswich.
 STUART : LESLIE CHARLES.
 THUELL : DONALD ALLEN, Bristol.
 VALLIS : ERIC WALTER HARVEY, F.S.I., Maidstone.
 WARD : RAYMOND JOHN, F.S.I.

ELECTION : OCTOBER, 1943

An election for candidates for membership will take place in October 1943. The names and addresses of the overseas candidates, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary R.I.B.A. not later than Wednesday, 22 September 1943.

The names following the applicant's address are those of his proposers.

AS FELLOW (1)

FAYAZUDDIN : MOHAMMAD [A. 1934], Architect and Town Planner, H.E.H. The Nizam's Government, Hyderabad (Deccan), India : Banjara Hills, Hyderabad. S. A. Ali, C. M. Master and H. F. King.

AS ASSOCIATE (1)

COHEN : LIONEL GEORGE, Dip. Arch. (C.T.). (Passed a qualifying Examination approved by the Institute of South African Architects), Atlantic Hotel, Beach Road, Seapoint, Cape Province, South Africa. Professor L. W. T. White, James Morris and H. J. Brownlee.

ELECTION : JULY, 1943

An election of candidates for membership will take place in July 1943. The names and addresses of the candidates, with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Byelaws are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary R.I.B.A. not later than Saturday, 10 July 1943.

The names following the applicant's address are those of his proposers.

AS FELLOWS (8)

- ALLBERRY: HARRY [A. 1901], 24 Whitebeam Avenue, Clonskeagh, Co. Dublin. F. G. Hicks, Sir Banister Fletcher and Vincent Kelly.
- FAWCETT: PETER GEORGE HERBERT [A. 1921], 19 Brookland Rise, N.W.11. Applying for nomination by the Council under the provisions of Byelaw 3 (d).
- HARRISON: JOHN EDWARD KENNETH [A. 1933], 2 Rivermead Court, Hurlingham, S.W.6. G. G. Macfarlane, W. H. Gunton and Miss Jane Drew.
- HICKEY: PATRICK [A. 1922], 130 Regent Street, W.1; Brenchley, Ockham Road, East Horsley, Surrey. A. E. Batzer, Norman Jones and P. D. Hepworth.
- HOLLIS: HENRY CLIFFORD [A. 1910], "Kenton," Green Street, Stevenage, Herts. H. A. Welch, J. C. S. Soutar and W. H. Jones.
- MCDONALD: ROBERT MACKINNON [A. 1922], 19 Silverwell Street, Bolton, Lancs.; 5 Lightburne Avenue, Bolton. A. J. Hope, W. J. Blain and C. G. Agate.
- MARLOW: ALAN FLETCHER [A. 1931], Controller of Building Construction, Ministry of Supply, W.C.2; "Beaulieu," High Beech, Near Loughton, Essex. A. D. Reid, E. H. Paisley and F. W. Halfhide.
- WILSON-WOOD: HARRY WILSON [A. 1935], Messrs. Humber, Ltd., Humber Road, Coventry; 26 Northumberland Road, Leamington Spa. E. G. W. Souster, A. C. Bunch and Arthur Ashton.

AS ASSOCIATES (2)

- The name of a school, or schools, after a candidate's name, indicates the passing of a recognised course.
- BAIRD: JAMES (Final), 123 Seedhill Road, Paisley, Scotland. H. Cook, James Taylor and J. S. Maitland.
- BRIERLEY: EDWARD WALTER, Dip. Arch. [Leeds School of Architecture], 9 Gledhow Park Road, Leeds, 7. Sir George Oatley, G. D. G. Hake and applying for nomination by the Council under the provisions of Byelaw 3 (d).

AS LICENTIATES (16)

- BEARPARK: JOHN RONALD, c/o Messrs. W. & J. Sagar, Ltd., Colne, Lancs.; "Crompton," Skipton Old Road, Colne, Lancs. G. M. Trench, W. F. Granger and L. H. Bucknell.
- CROMIE: STANLEY HUDSON, Air Ministry Directorate of Works; 84 Bigsby Road, Retford, Notts. J. B. Cooper and applying for nomination by the Council under the provisions of Byelaw 3 (d).
- CROSS: MAX GEORGE, 3 Manor Road, Weymouth. E. W. Lewis, A. E. Geens and Ernest Bird.
- DORWARD: JAMES, 52 Leith Walk, Leith 6; 8 Paties Road, Edinburgh XI. J. R. McKay, T. F. MacLennan and W. I. Thomson.
- DUXBURY: JAMES, Borough Engineer's Department, Architectural Section, Municipal Buildings, Swinburne Street, Gateshead-on-Tyne; 76 Queen Alexandra Road, Sunderland, Co. Durham. C. A. C. Greene, S. H. Lawson and W. Milburn.
- JACK: JAMES DEAS, County Buildings, Dumfries; "Nideggen," Noblehill, Dumfries. Jos. Weekes and applying for nomination by the Council under the provisions of Byelaw 3 (d).
- JACKSON: EDWIN, c/o Robert Burke, Esq., Singleton House, Northumberland Road, Newcastle-on-Tyne; 32 Waverley Crescent, Lemington, Northumberland. F. W. Harvey, R. N. Mackellar and H. L. Hicks.
- JAMES: JOHN LEWIS THOMAS, Miners' Welfare Commission, 29 High Street, Cardiff; 67 Lake Road West, Cardiff. W. M. Traylor, F. S. Swash and C. F. Bates.
- KIRK: DAVID GRAY, 9 Roseberry Crescent, Edinburgh 12; 17 Windsor Place, Portobello, Midlothian. John Jerdan, J. R. McKay and A. H. Mottram.
- MURRAY: DAVID ALEXANDER, 9 Roseberry Crescent, Edinburgh 12; 119 Trinity Road, Edinburgh 5. J. A. Arnott, John Wilson and J. I. Morrison.
- OSMAN: PERCIVAL FREDERICK ROBERT, 28 Gurney Road, Shirley, Southampton. Ernest Bird, A. E. Geens and Ingaltion Sanders.
- PAGE: LT.-COL. STANLEY HATCH, C.M.G., T.D., F.S.I., 25 Chapel Place, Ramsgate; Upalung, Headcorn, Kent. H. C. Ashenden, H. Anderson and E. A. Jackson.
- SPIERS: ERNEST NOEL, c/o War Department, Chief Engineer, North Midland District, Nottingham; 43 Sudeley Avenue, Leicester. W. K. Beddingfield, G. A. Cope and A. F. Bryan.
- SYKES: CLARK HODGSON, St. George's Hall, Bradford; 49 Duckworth Lane, Bradford. W. Illingworth, W. E. Trent and W. S. Trent.
- WEBBE: ARTHUR HAROLD FRANK, Hermitage, London Road, Slough. Professor A. E. Richardson, H. O. Corfiato and J. H. Sayner.
- WHYTE: JOHN MACFARLANE, Bloomgate House, Lanark. J. A. Coia, Alexr. Wright and applying for nomination by the Council under the provisions of Byelaw 3 (d).

Notices

ASSOCIATES AND THE FELLOWSHIP

Associates who are eligible and desirous of transferring to the Fellowship are reminded that if they wish to take advantage of the next available election they should send the necessary nomination forms to the Secretary R.I.B.A. as soon as possible.

THE USE OF TITLES BY MEMBERS OF THE ROYAL INSTITUTE

In view of the passing of the Architects Registration Act 1938, members whose names are on the Statutory Register are advised to make use simply of the title "Chartered Architect" after the R.I.B.A. affix. The description "Registered Architect" is no longer necessary.

ARCHITECTS' AND SURVEYORS' FEES IN CLAIMS UNDER FIRE INSURANCE POLICIES

The Practice Committee of the R.I.B.A., in conjunction with representatives of the Chartered Surveyors' Institution, have had under consideration the question of professional fees in connection with reinstatements after fire.

No difficulty arises in connection with a fire in a building in course of erection, because the building contract provides for such occurrences. It is in connection with a fire in an existing building that difficulties are likely to arise, owing to the policy being frequently indefinite in its terms. The ordinary insurer of a building in many cases does not realise that, although the services of an architect and a quantity surveyor and sometimes a clerk of works are normally essential to a rebuilding owner, unless he is specifically covered against these fees they do not form part of the Insurance company's liability for payment in the case of partial or complete destruction of the building; and in many cases the insurer is not aware of this until it is too late.

In the interests of both themselves and their clients members are advised to take every possible step to ensure that fees for professional services are specifically covered in fire insurance policies.

CESSATION OF MEMBERSHIP

Under the provisions of Byelaw 21 the following has ceased to be a member of the Royal Institute:—

As Fellow
Wilfrid Irwin Travers.

MEMBERS' COLUMN

Friends of MR. DALE CUTHBERTSON [A.], Hon. Secretary of the Institute of Architects of Malaya, will be glad to know that he succeeded in escaping from Singapore before its fall and is now in Australia. His address is: 80 Venice Street, Mentone, S.11, Victoria.

GLAMORGAN COUNTY ARCHITECT

Mr. J. Williamson [F.], having reached the age limit, has retired from the position of Architect to the Glamorgan County Council, which he has held for 31 years. His deputy, Mr. Lawford R. Gower [F.], has succeeded him.

OBITUARY

We regret to record the death of Mr. W. G. Wilson, one of the Royal Institute's oldest members: elected 62 years ago in 1881.

CHANGE OF ADDRESS

MR. ERIC G. V. HIVES has now closed his temporary office at Gloucester and will conduct his practice from 106 Regent Street, London, W.1, and at Reading.

PARTNERSHIPS

ARCHITECT of wide experience wishes to buy partnership or practice in London area.—Reply, Box 1553, c/o Secretary R.I.B.A.

FELLOW, with old-established City and hospital practice, offers sleeping partnership to young member at present serving with H.M. Forces. Lack of full professional qualifications no immediate bar.—Box 2153, c/o Secretary R.I.B.A.

FOR SALE

FOR SALE, the following books, in new condition:—Gunn, *Modern Building Technique*; Fitzmaurice, *Principles of Modern Building*, Vol. I. Also D.E. $\frac{1}{2}$ Imp. and $\frac{1}{4}$ Imp. drawing boards.—Write, Box 2163, c/o Secretary R.I.B.A.

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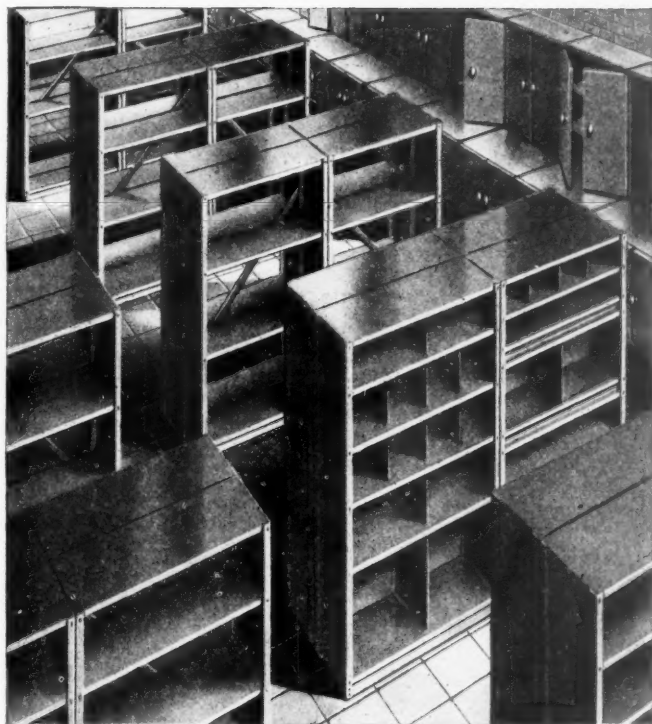
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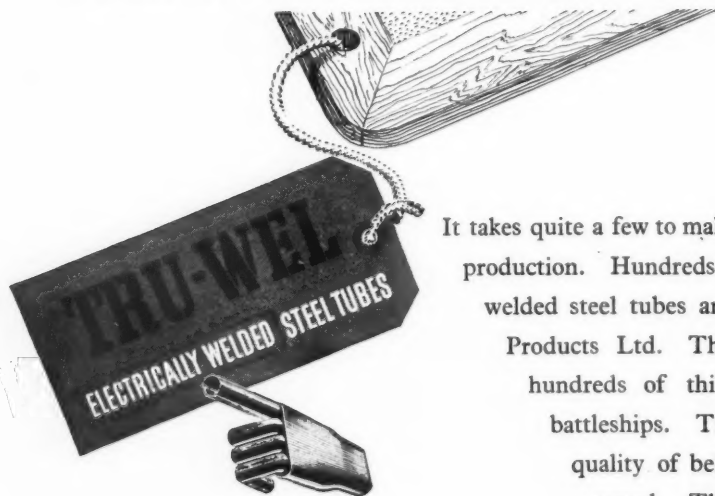
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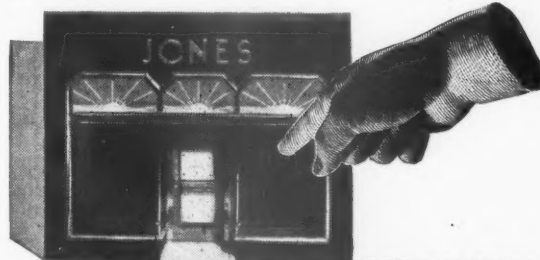
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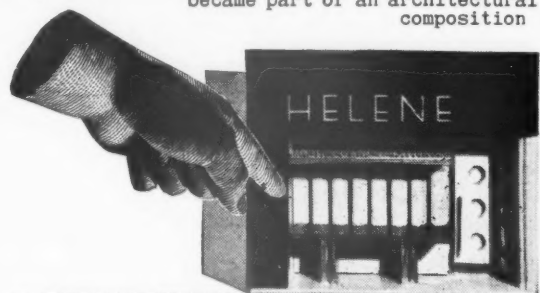
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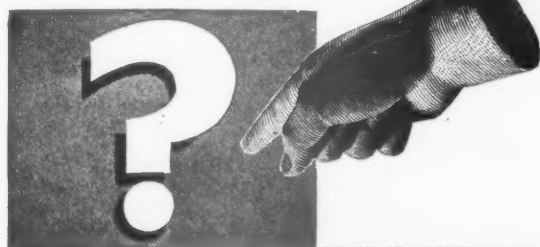
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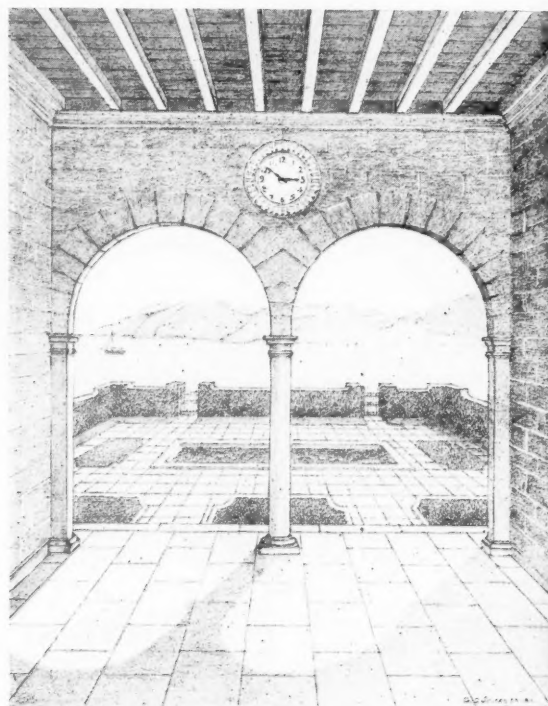
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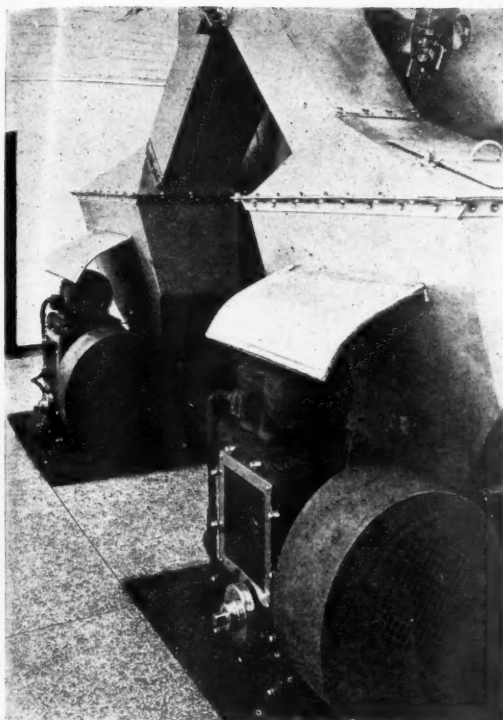
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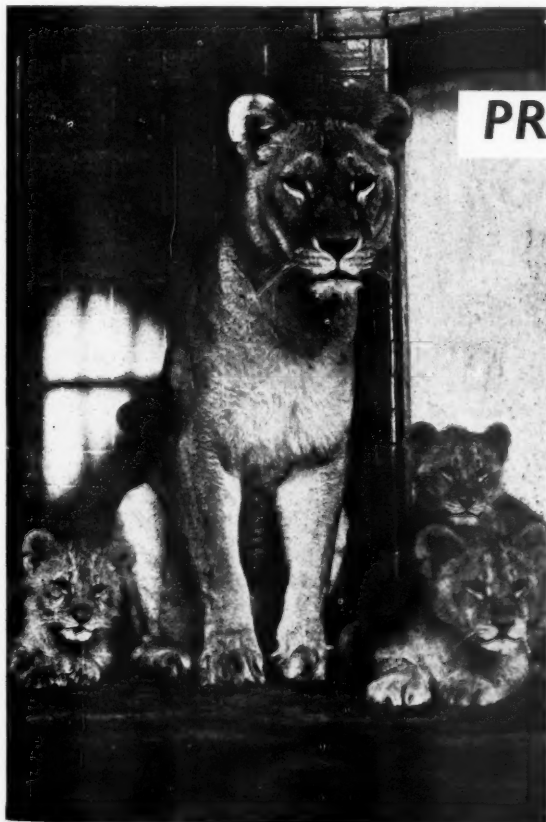
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